



EUROPEAN CENTRAL BANK
EUROSYSTEM

SCoREBOARD

Advisory Group on Market Infrastructures for
Securities and Collateral

First Compliance & Progress Report

June 2020



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Foreword



Since the publication of the [Collateral Management Harmonisation Report](#) in December 2017, the Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) has made a number of significant breakthroughs in its ambition to create a **Single Collateral Management Rulebook for Europe (SCoRE)**. In 2019 a first set of building blocks were developed related to Triparty Collateral Management, Corporate Actions and Billing Processes. A Single Triparty Model for Europe has been agreed which defines common processes for interaction between all major European triparty service providers and their participants. We have also seen success in the highly complex area of Corporate Actions with the definition of a detailed set of Standards focusing initially on corporate events relevant for debt instruments. Billing Processes have been harmonised to facilitate the transfer of billing information along the value chain. These achievements have been made possible by all relevant financial market stakeholders working together, and demonstrate the collective strength and commitment of the European financial market infrastructures, market participants and central banks which make up the AMI-SeCo community.

We are now looking at the first steps taken towards achieving compliance with the already agreed Standards. National Stakeholder Groups (NSGs) have been established in AMI-SeCo markets in order to support these efforts. The Eurosystem will also support this initiative from an operational point of view by adopting the agreed AMI-SeCo Standards for its collateral management processes as of the go-live of the Eurosystem Collateral Management System (ECMS). Earlier this year market stakeholders also demonstrated their commitment to this initiative through the creation of detailed SCoRE Adaptation Plans whose implementation will be subject to regular monitoring and assessment, with the assessment results being made transparent in the form of a regular SCoREBOARD report.

I am now pleased to introduce to you the first SCoREBOARD report. The results presented in the Report confirm the strong commitment and willingness by all relevant stakeholders to implement the Standards in line with the agreed roadmap. I would like to take the occasion to thank the AMI-SeCo community as a whole for the significant effort which has been put into developing these detailed plans.

We recognise the need to engage all relevant market stakeholders in this initiative in an inclusive way. That is why the SCoRE initiative is truly focused on Europe and is not limited in scope to the euro area or to TARGET2-Securities (T2S) markets. I would like to thank the NSGs for their efforts to reach out to all constituencies, including the issuer and post-trade community in their markets, in order to implement this initiative. The NSGs will continue to play a critical role in the success of the SCoRE initiative.

Overview

SCoRE in numbers



While the primary focus of the SCoREBOARD reports is to follow the progress in implementing the Standards in AMI-SeCo markets, the reports will also follow the progress in defining further Standards in identified (e.g. Corporate Action Standards for equities) and possibly non-identified areas which will collectively make up the Single Collateral Management Rulebook for Europe (SCoRE). AMI-SeCo's Collateral Management Harmonisation Task Force (chaired by Ms Gesa Benda, Bank of New York Mellon), together with its dedicated Expert Groups, will continue to spearhead the development of additional Standards in close collaboration with the NSGs and all relevant industry associations.

With the continued efforts and commitment shown to date, I am confident that we will realise our ambition to define and implement a Single Collateral Management Rulebook for Europe, which in turn will contribute substantially to the efficiency of post trade services in Europe and to establishing a Capital Markets Union. The SCoREBOARD report will be published every six months to keep you up to date on the latest developments.

Ulrich Bindseil

Chairperson of the Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo)

Executive summary

This is the first in a series of regular reports published by the Eurosystem's Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) covering the progress in defining, and assessing compliance with, the Single Collateral Management Rulebook for Europe (SCoRE).

The report covers four main areas as outlined in Box 1 below. The Executive Summary presents the key messages. Further details can then be found in the following sections.

Box 1

SCoREBOARD Overview

Participation

24 out of 29 AMI-SeCo markets participated in the exercise



Progress

Detailed analysis of the Standards is underway



Compliance

Some compliance with the Standards has already been achieved: follow-up actions are required



Compliance Indicators

Full compliance expected by the majority of entities by AMI-SeCo deadlines



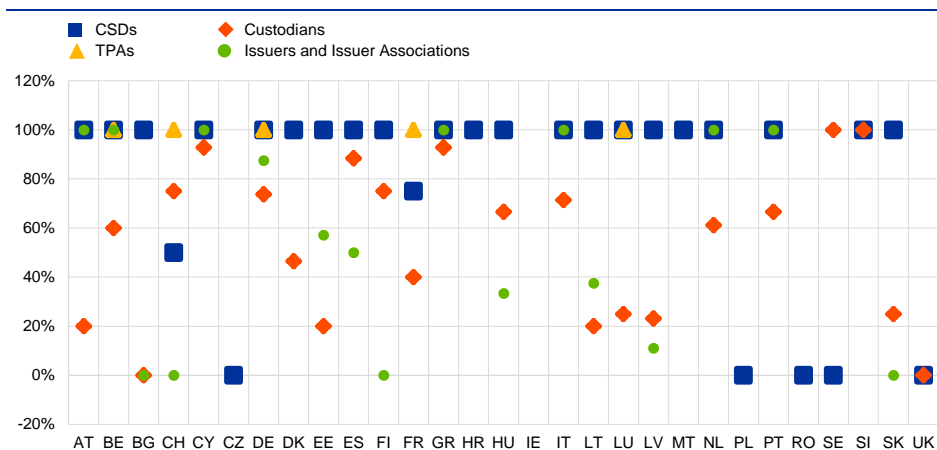
1) Participation

Most markets (24 out of 29) participated in the first SCoRE monitoring exercise.

- All Triparty Agents (**TPAs**) (8 out of 8) participated in the exercise.
- The majority of Central Securities Depositories (**CSDs**) (30 out of 38) also participated in the exercise.

- There was a broad involvement of **custodians** in the exercise, with a minimum of five custodians reporting in most markets, thus ensuring wide coverage of custody activities in each market. In some markets there is a need for further engagement in order to achieve broader representation of custodians.
- **Issuer** engagement has commenced in the field of Corporate Actions. Further work on issuer engagement is needed in all markets.
- Some **markets** (NSGs) have not yet reported (i.e. the Czech Republic, Ireland, Poland, Romania and the United Kingdom). In particular, further engagement is planned with these markets with a view to putting in place the necessary reporting structures in order to ensure participation in future exercises.
- For the smaller number of **markets without an NSG** at present (i.e. the Czech Republic, Croatia, Poland, Romania and Sweden), most are making progress towards establishing NSGs or coordination forums to support the implementation of the Single Collateral Management Rulebook for Europe in these markets.

Chart 1
Participation rate per market



Notes: Percentages reflect the proportion of completed surveys submitted per entity type by monitored entities in each AMI-SeCo market.

2) Progress







The majority of reporting markets are **on schedule**.

- **In the area of Triparty Collateral Management:**
 - **Most Standards are on schedule.** TPAs are currently focusing on conducting a detailed analysis of the Standards and are planning user communication. In addition, Eurex CCP has commenced efforts (in their role as user) in view of November 2022 adoption. Further engagement with other CCPs is needed.

- **Issues:** Efforts to comply with Standard 1 (on ISO 20022) and Standard 8 (Reporting of Flows) are not clear and/or have not been initiated by three TPAs, namely Euroclear Bank, Euroclear France and SIX SIS. Please refer to the follow-up actions identified below for more details.
- **In the area of Corporate Actions:**
 - **Most Standards are on schedule (for CSDs and TPAs).** Some Standards are already in the process of being implemented by CSDs and TPAs as a result of synergies with SRDII requirements. Compliance from custodians with many of the SCoRE Corporate Actions (CA) Standards is generally on track i.e. in 15 (out of 29) markets, meaning that more than 50% of custodians were on track (see Section 2.2.3).
 - **Behind schedule:** Two CSDs reported delays in their efforts to comply with certain Standards: NBB-SSS has delays for Standards 1 (F, G, H), S2 and S15. KELER has delays for Standards 1B, S10, S12, S15.
 - **Issues:** Four CSDs have issues that require attention, including Euroclear Finland who recently explained that all priorities are being analysed in view of their T2S migration and that a new planning exercise is needed. Euroclear Bank will adapt to Standard 15 (ISO 20022) as part of their migration to T2S but further clarity is needed. SIX SIS should also provide further clarity on Standard 15 and KELER on Standard 13. Several CSDs did not participate (i.e. CSDs in the Czech Republic, Poland, Romania, Sweden and the United Kingdom). Please refer to the follow-up actions identified below for more details.
- **In the area of Billing Processes**
 - **Most Standards are on schedule (for CSDs and TPAs).** Compliance from custodians is also generally on track.
 - **Issues:** Five CSDs (ESES CSDs in Belgium, France and the Netherlands, Euroclear Finland and SIX SIS) should provide further clarity on their efforts to comply with Standards 1 (ISO 20022) and 4 (Payment date). Several CSDs did not participate (i.e. in the Czech Republic, Poland, Romania, Sweden and the United Kingdom). Further clarity is also required from a number of TPAs. Please refer to the follow-up actions identified below for more details.

Box 2

Overview of progress per activity

	 On schedule	 Behind schedule	 Issues
 Triparty Collateral Management	5 TPAs <ul style="list-style-type: none"> • BE – BNY Mellon • DE – Clearstream Frankfurt • FR – BNP Paribas • LU – Clearstream Luxembourg • LU – JP Morgan 	N/A	3 TPAs <ul style="list-style-type: none"> • BE – Euroclear Bank (S1, S8) • CH – SIX SIS (S1, S8) • FR – Euroclear France (S1, S8)
 Corporate Actions	24 CSDs <ul style="list-style-type: none"> • AT – OeKB • BE – Euroclear BE • BG – BNB-SSS • BG – CDAD • CY – CSE • DE – Clearstream • DK – VP • EE – NASDAQ • ES – Iberclear • FR – Euroclear FR • FR – ID2S • GR – AthexCSD • GR – BOGS • IT – Monte Titoli • LT – NASDAQ • LU – Clearstream • LU – LuxCSD • LV – NASDAQ • MT – MSE • NL – Euroclear NL • PT – Interbolsa • SI – KDD • SK – CDCP • SK – NCDCP 	2 CSDs <ul style="list-style-type: none"> • BE – NBB-SSS (1F to 1H) • HU – Keler (1B) 	12 CSDs <ul style="list-style-type: none"> • CH – SIX (S13, S15) • CZ – CSD Prague (N/R) • CZ – SKD (N/R) • BE-Euroclear Bank (S15) • FI – Euroclear FI (Dates TBC) • HR – SKDD (Dates TBC) • PL – KDPW (N/R) • PL – SKARBNET4 (N/R) • RO – Dep. Central (N/R) • RO – NBR SSS (N/R) • SE – Euroclear SE (N/R) • UK – Euroclear UK (N/R)
	7 TPAs <ul style="list-style-type: none"> • BE – BNY Mellon • BE – Euroclear Bank • DE – Clearstream • FR – BNP Paribas • FR – Euroclear France • LU – Clearstream • LU – JP Morgan 	N/A	1 TPAs <ul style="list-style-type: none"> • CH – SIX SIS (1F to 1H – N/R)
	52% of Custodians	N/A	N/A
 Billing Processes	25 CSDs <ul style="list-style-type: none"> • AT – OeKB CSD • BE – Euroclear Bank • BE – NBB-SSS • BG – BNB-SSS • BG – CDAD • CY – CSE • DE – Clearstream • DK – VP • EE – NASDAQ • ES – Iberclear • FR – ID2S • GR – AthexCSD • GR – BOGS • HU – Keler • IT – Monte Titoli • LT – NASDAQ • LU – Clearstream • LU – LuxCSD • LV – NASDAQ • MT – MSE • PT – Interbolsa • SI – KDD • SK – CDCP • SK – NCDCP 	N/A	13 CSDs <ul style="list-style-type: none"> • BE – Euroclear BE (S4) • CH – SIX SIS (S1 - Dates) • CZ – CSD Prague (N/R) • CZ – SKD (N/R) • FR – Euroclear FR (S4) • FI – Euroclear FI (Dates) • NL – Euroclear NL (S4) • PL – KDPW (N/R) • PL – SKARBNET (N/R) • RO – Dep. Cent (N/R) • RO – NBR-SSS (N/R) • SE – Euroclear SE (N/R) • UK – Euroclear UK (N/R) • HR – SKDD (Dates TBC)
	6 TPAs <ul style="list-style-type: none"> • BE – BNY Mellon • BE – Euroclear Bank • DE – Clearstream • FR – BNP Paribas • LU – Clearstream • LU – JP Morgan 	N/A	2 TPAs <ul style="list-style-type: none"> • CH – SIX SIS (S1) • FR – Euroclear France (S4)
	52% of Custodians	N/A	N/A

Notes: Box 2 provides an overview of the reporting entities that have commenced their analysis of the Standards as per Compliance Indicator 1.1: On schedule indicates that analysis has commenced; Behind schedule indicates that analysis will not commence until a later date; Issues indicate that analysis has not started and no timeline has been provided. For custodians, the percentages reflect the number of AMI-SeCo markets where analysis of the Standards has been commenced by the majority of custodians.

3) Follow-up actions

In order to tackle the issues identified, a series of follow-up actions are planned.

- **In the area of Triparty Collateral Management:**
 - **Standard 1 (ISO 20022 messaging):** A schedule / Adaptation Plan is requested from three TPAs, namely Euroclear Bank, Euroclear France and SIX SIS. Input on Standard 1 should be provided in the next survey.
 - **Standard 8 (Reporting on Flows):** This was reported as not applicable (N/A), but it is applicable and a schedule / Adaptation Plan is needed from three TPAs, namely Euroclear Bank, Euroclear France and SIX SIS. Input on Standard 8 should be provided in the next survey.

- **In the area of Corporate Actions:**
 - **Standard 5 (Negative cash flow):** If the CSD only accepts securities with a positive interest rate or floating rate coupons with a floor, this should be reported as compliant as indicated in the Standard. Nasdaq, KELER and Interbolsa are invited to update their feedback in the next round.
 - **Standard 11 (Default options):** A default option should be supported irrespective of whether it is used. If this is the case, this should be reported as compliant. SIX SIS is invited to update their feedback in the next round.
 - **Standard 12 (Fees):** In some CSDs, fees are not applied as a result of participation in a CA event (on all assets held as issuer CSD and investor CSD). The N/A reason (no fees) should be provided when responding. All CSDs are invited to use this consistent approach in the next round.
 - **Standard 13 (Reversals):** Processes for reversals must be implemented (including the notification of reversal). KELER and SIX SIS are invited to update their feedback in the next round.
 - **Standard 14 (Foreign currency):** If no foreign currency is handled in the CSD, the N/A reason should be provided when responding.
 - **Standard 15 (ISO 20022)** should be implemented according to a clear plan. In the next round, further clarity on planning should be provided by Euroclear Bank, Euroclear Finland and SIX SIS.

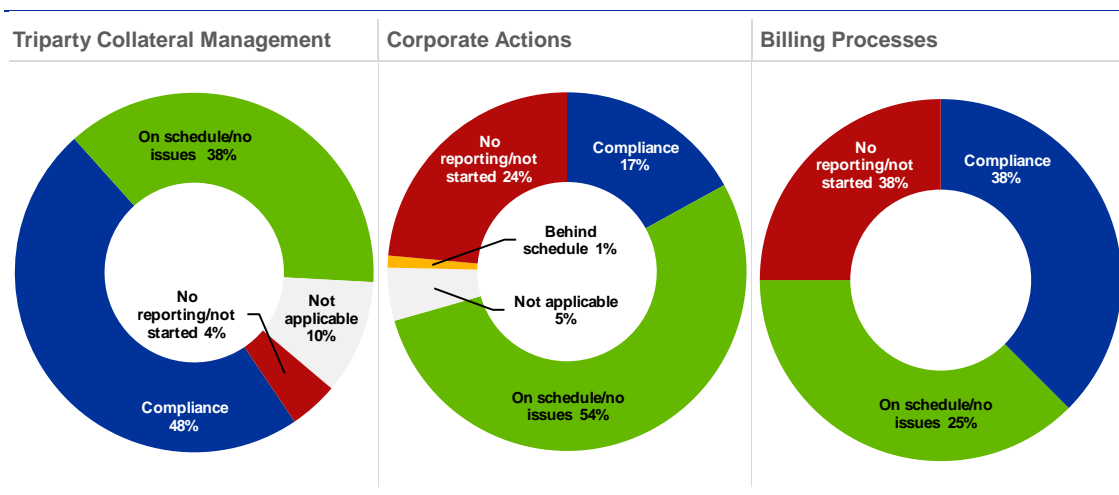
- **In the area of Billing Processes:**
 - **Standard 1 (ISO 20022):** planning information on efforts to comply with Standard 1 is required from SIX SIS (TPA) and Euroclear Finland.
 - **Standard 4 (Payment date):** Compliance should not depend on the party creating the payments (i.e. CSD participants). In the next round, clarity is needed on the status of Standard 4 from ESES CSDs (in Belgium, France

and the Netherlands) and Euroclear Finland. Euroclear France should also provide clarity on Standard 4 in its role as TPA.

In all cases, the follow-up actions underscore the importance of having a comprehensive Adaptation Plan with clear timelines in place.

Box 3

Overview of compliance per activity



Notes: The graph provides a snapshot of the current status of compliance per activity by illustrating the colour codes assigned to (i) TPAs for the Triparty Collateral Management Standards and (ii) to CSDs for the Corporate Actions and Billing Processes Standards. Proportions are calculated based on the number of Standards of a certain colour across all AMI-SeCo markets. For further details please refer to the SCoREBOARD in Section 2.

4) Compliance Indicators

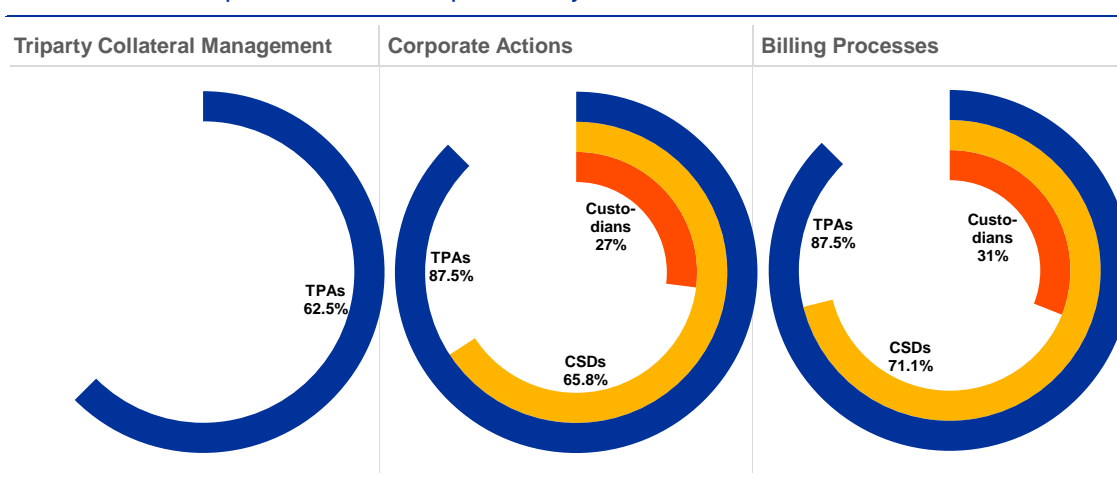
The Compliance Indicators do not point to major obstacles to achieving full compliance with the SCoRE Standards, but further efforts should be undertaken to achieve full compliance on time.

- **In the area of Triparty Collateral Management:**
 - **Majority of TPAs, namely 62.5%, expect to be on track to achieve full compliance on time.**
- **In the area of Corporate Actions:**
 - **For CSDs and TPAs, the majority of reporting entities expect to be compliant on time** (i.e. 65.8% of CSDs and 87.5% of TPAs). The gap primarily relates to ongoing planning exercises in non-euro CSDs. The number is therefore expected to increase during the next monitoring exercise as remaining Adaptation Plans are finalised.
 - **For custodians, the numbers are low** (in 15 out of 29 markets, more than 50% of custodians were on track, see Section 3.2.3.) and further action is needed to increase awareness among custodians in view of meeting the deadline for compliance on time.

- **In the area of Billing Processes:**
 - **For CSDs and TPAs, the majority of reporting entities expect to be compliant on time** (i.e. 71.1% of CSDs and 87.5% of TPAs). As with Corporate Actions, the gap primarily relates to ongoing planning exercises in non-euro CSDs. The number is therefore expected to increase in the next monitoring exercise as remaining Adaptation Plans are finalised.
 - **For custodians, the numbers are low** (in 15 out of 29 markets, more than 50% of custodians were on track) and further action is need to increase awareness among custodians in view of meeting the deadline for compliance on time.

Box 4

Overview of Compliance Indicators per activity



Notes: Box 4 provides an overview of the reporting entities that expect to meet the final Compliance Indicator prior to the implementation deadline. Percentages are calculated based on the expected number of respondents across all AMI-SeCo markets. See Section 3 for further details.

The report is structured as follows:

- **Section 1** provides an overview of the current status of the ten harmonisation activities.
- **Section 2** presents the SCoREBOARD for the implementation phase.
- **Section 3** focuses on the Compliance Indicators which determine whether markets are on track to achieve compliance in accordance with the timeframe agreed by AMI-SeCo.
- **Section 4** monitors the evolution of market-wide adoption of the ISO 20022 messaging protocol.
- **Annex 1** provides an overview of the reporting carried out per activity (e.g. Corporate Actions) at market level as conducted by each NSG.
- **Annex 2** provides a glossary of the most commonly used terms throughout this document.

1 Introduction

The Single Collateral Management Rulebook for Europe (SCoRE) is an AMI-SeCo initiative to define common rules for managing collateral. The SCoRE initiative commenced in December 2017 with the identification of ten activities for which further harmonisation is needed in order to improve the efficiency of collateral management in Europe.¹

Box 5 SCoRE activities

Collateral Management Harmonisation Activities

The CMH-TF have identified 10 areas where further harmonisation is needed.

 1. Triparty Collateral Management Harmonisation of Triparty Collateral Management workflows and messaging in order to facilitate interoperable processes allowing collateral mobility across Triparty Agents.	 6. Billing Processes Harmonisation of billing procedures, workflows and messaging.
 2. Corporate Actions Harmonisation of Corporate Actions processes, workflows and messaging by reinforcing existing harmonisation standards or adding new harmonisation standards (taking into account specific considerations from a collateral management perspective).	 7. Cut-Off Times Minimum requirements for end-of-day cut-off times to avoid possible different value dates in cross-infrastructure transactions in different markets, which may create frictions for market participants active in different markets.
 3. Taxation Processes Harmonisation of tax processing in the context of collateral management (taking into account identification of parties in collateralised transactions).	 8. Collateral Dynamic and Static Data Harmonisation of data exchanges to ensure that information / data is available where necessary. Market practices needed for use of data.
 4. Bilateral Collateral Management Harmonisation of workflows for bilateral collateral management (covering non-cleared OTC derivatives and securities financing). Interoperability and leverage of existing infrastructures and market platforms.	 9. Sourcing of Collateral Minimum requirements for sourcing/movement of collateral across Europe.
 5. Margin Calls Interoperability and leverage of existing infrastructures and market platforms for margin processes.	 10. Non-Euro Collateral Market practices for the handling of non-euro denominated collateral (including related corporate action processes).

Each of these ten activities has been analysed / is being analysed by a dedicated AMI-SeCo task force on collateral management harmonisation (CMH-TF) in view of defining harmonisation Standards (AMI-SeCo Standards).

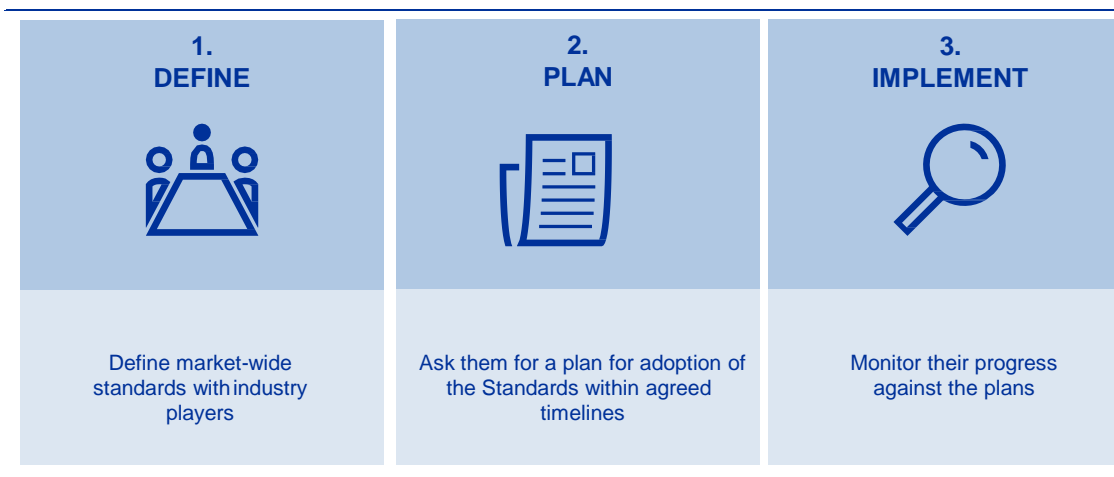
AMI-SeCo has agreed on a [Monitoring Framework](#) which defines the methodology against which implementation of the Standards is monitored. The Framework consists of three phases.

¹ Please refer to the [Collateral Management Harmonisation](#) report for further information.

1. The first phase of the AMI-SeCo monitoring process is the definition of Standards for each of the aforementioned ten activities.
2. Once the Standards have been defined the focus then moves to the planning phase with the preparation of Adaptation Plans (phase 2) in each market.
3. Phase 3 focuses on the monitoring of the implementation in order to ensure that implementation of the plans remains on schedule and in accordance with the agreed milestones.

Box 6

SCoRE Monitoring – Overview of the three phases



1.1 Define

In 2019, AMI-SeCo endorsed the definition of the first set of AMI-SeCo Standards related to three of the ten activities, namely:

- [Triparty Collateral Management](#)
- [Corporate Actions](#)
- [Billing Processes](#)

1.2 Plan

Details of the Adaptation Plans prepared for the three activities related to Triparty Collateral Management, Corporate Actions and Billing Processes can be found in the [SCoRE Adaptation Plans Status Report](#) (status as at July 2020).

1.3 Implement

This report focuses on the implementation of the Standards that have already been defined. Full details of the implementation status across all AMI-SeCo markets can be found in Sections 2 and 3. Annex 1 provides a link to a more detailed breakdown of the implementation status at market level as prepared by each NSG.

2 SCoREBOARD – Compliance

Background

This Section provides an overview of the current status of compliance with the Standards defined for each activity. CSDs and TPAs are monitored on an individual basis and are assigned a colour-coded status in accordance with the methodology outlined in Box 1.² Custodians and issuers are monitored on an aggregated basis per market and assigned a percentage compliance status. Full details of the agreed milestones which form the basis of the colour-coded assessment can be found in Section 3.

Box 7

SCoREBOARD – Compliance



SINGLE COLLATERAL MANAGEMENT RULEBOOK
FOR EUROPE

- The Standard has been implemented
- Implementation of the Standard is on schedule (based on the agreed milestones)
- Implementation is behind schedule (based on the agreed milestones)
- Implementation has not started

For custodians and issuers, progress is monitored and reported as a percentage; for example the percentage (%) of custodians in a given market who have started internal adaptation of IT systems.

In this section, for each set of Standards the report assesses the implementing actors' progress towards achieving full compliance with the Standards. A summary chart is included to provide an overview of the compliance statuses presented in the SCoREBOARD.

As this is the first monitoring exercise, a series of action points have also been identified which should be taken into account for the next monitoring exercise in order to enhance the quality of the information provided.

² For further details please refer to the [AMI-SeCo Monitoring Framework](#)

2.1 Triparty Collateral Management

Background

The Single Collateral Management Rulebook for Europe (SCoRE) contains 17 Standards related to Triparty Collateral Management (published as the [AMI-SeCo Standards for Triparty Collateral Management](#)). This section presents the compliance status of the monitored entities as at May 2020.

The Standards being assessed are listed below:

Table 1
SCoRE Triparty Collateral Management Standards

No.	Name
1	ISO 20022 messages for triparty collateral management
2	Initiation of a triparty transaction
3	Increase of a triparty transaction
4	Decrease of a triparty transaction
5	Revaluation of a triparty transaction
6	Cancellation of a triparty instruction
7	Unilateral removal process
8	Reporting on flows
9	Reporting on stocks
10	Closure of a triparty transaction
11	Handling of corporate actions
12	Partial allocation
13	Reference data
14	Usage of baskets
15	Future dated processing
16	Operating hours
17	Cut-off times

Source: [Triparty Collateral Management: Single Collateral Management Rulebook for Europe](#)

The monitored entities (from the provider side) are:

- Triparty Agents: a dedicated survey was sent (see Section 2.1.1)

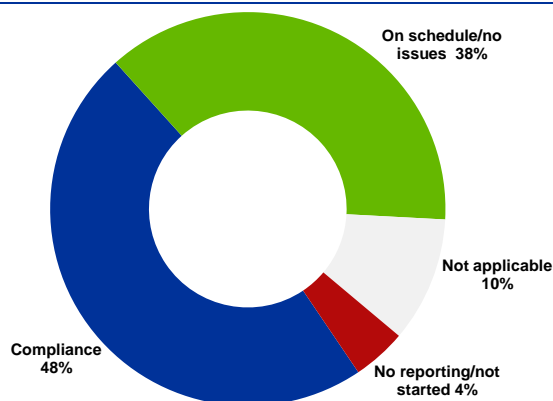
The monitored entities (from the user side) are:

- CCPs: CCPs are monitored by NSGs in their role as users of Triparty Collateral Management Services and are therefore assessed on their ability to communicate with their TPA using ISO 20022 messaging. So far, Eurex Clearing AG CCP has started its internal analysis of the adoption of ISO 20022 messaging by November 2022.
- Eurosystem national central banks: NCBs are monitored by the ECB in their role as users of Triparty Collateral Management Services. All Eurosystem NCBs are on track.

2.1.1 SCoRE Triparty Collateral Management Standards – TPA Compliance

Chart 1

TPAs' compliance with SCoRE Triparty Collateral Management Standards



Notes: The graph summarises the colour codes assigned to the Standards in the Triparty SCoREBOARD (see Table 2). Proportions are calculated based on the number of Standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
<p>Compliance: Some of the Triparty SCoRE Standards are already being complied with (mainly related to Triparty Collateral Management processes regarding initiation, increase, reporting on stock and partial settlement).</p> <p>On Schedule: A large part of the remaining Standards is on schedule towards compliance.</p> <p>Behind Schedule: -</p> <p>No reporting / not started: Progress towards achieving compliance with Standard 1 (ISO 20022) and Standard 8 (Reporting Flow) is not on track / no implementation date has been provided for three TPAs, i.e. Euroclear Bank, Euroclear France and SIX SIS. (see action point).</p> <p>Not applicable: Standards 11 (handling of corporate actions), 16 (operating hours) and 17 (cut-off times) are only applicable in the context of collateralisation of central bank credit operations. Standard 8 was reported as "not applicable" but should be corrected (see action point).</p>	<p>Standard 8 (Reporting on flows) was in some cases reported as "not applicable" (by Euroclear Bank and Euroclear France) or there was not yet an internal decision to implement the new reporting on flows (by SIX SIS). This should be corrected. A Red status has been assigned, as the Standard is applicable to all TPAs. Feedback should be provided on the status of their compliance to track progress.</p> <p>Standard 1 (ISO 20022 messaging) is being considered by all TPAs, but feedback from three TPAs is not clear as to if and when Standard 1 will be implemented. In the next survey, all TPAs should clarify the status related to all ISO messages in Standard 1 (as all messages are to be implemented).</p>

Table 2**SCoREBOARD – Triparty Collateral Management Standards**

	BE BNY Mellon	BE Euroclear Bank	CH SIX SIS	DE Clearstream Banking Frankfurt	FR BNP Paribas	FR Euroclear France	LU Clearstream Banking Luxembourg	LU JP Morgan
1	G	R	R	G	G	R	G	G
2	B	B	G	B	B	B	B	B
3	B	B	G	B	B	B	B	B
4	B	B	G	G	G	B	G	B
5	B	B	G	G	B	B	G	B
6	G	B	G	B	G	B	B	B
7	G	B	G	G	G	B	G	G
8	G	R	R	G	B	R	G	G
9	B	B	G	B	B	B	B	B
10	G	B	G	B	G	B	B	B
11	N/A	B	G	G	N/A	N/A	G	N/A
12	B	B	G	B	B	B	B	B
13	G	G	G	G	G	G	G	G
14	B	B	G	G	B	B	G	G
15	G	B	G	N/A	B	B	N/A	B
16	N/A	N/A	G	B	B	B	B	N/A
17	N/A	N/A	G	B	N/A	N/A	B	N/A

Notes: For TPAs, the colour code reflects the current implementation status of each Standard in accordance with the methodology outlined in Box 7 above. **ECB Plausibility Check: Standard 1 was assigned Red for Euroclear Bank, Euroclear France and SIX SIS. Standard 8 was assigned Red for SIX SIS, Euroclear Bank and Euroclear France.**

2.2 Corporate Actions

Background

The Single Collateral Management Rulebook for Europe (SCoRE) contains 15 Standards relating to the processing of Corporate Actions (published as the [AMI-SeCo Standards for Corporate Actions](#)). This section presents the compliance status of the monitored entities as at May 2020.

The Standards being assessed are listed below:

Table 3
SCoRE Corporate Actions Standards

No.	Name
1A	Corporate Action Notification
1B	Corporate Action Instruction
1C	Corporate Action Advice
1D	Corporate Action Confirmation
1E	Corporate Action Reversal
1F	Meeting Event Notification
1G	Meeting Event Instruction
1H	Meeting Event Confirmation
2	Provision of data necessary for calculating proceeds
3	Consistency of information provided by issuer (I)CSDs, investor (I)CSDs and custodians
4	Rounding rules
5	Negative cash flows
6	Business day rule
7	Securities amount data
8	Payment time
9	Notification of processing status
10	Blocking of securities
11	Availability of default options
12	Handling of fees for meeting-related CA events
13	Reversal of a corporate action
14	Processing of foreign currency payments
15	ISO 20022 messages for corporate actions

Source: [Corporate Actions: Single Collateral Management Rulebook for Europe](#)

The monitored entities (from the provider side) are:

- CSDs (see Section 2.2.1)
- Triparty Agents (see Section 2.2.2)
- Custodians (see Section 2.2.3)

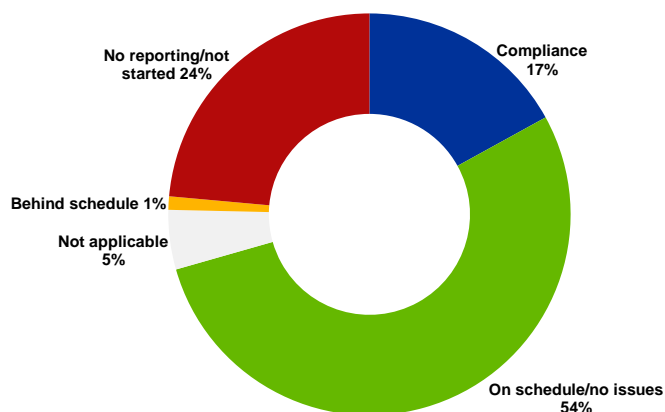
The monitored entities (from the user side) are:

- Issuers (see Section 2.2.4)
- Eurosystem national central banks: NCBs are monitored by the ECB in their role as users of Corporate Actions services. All Eurosystem NCBs are on track.

2.2.1 SCoRE Corporate Actions Standards – CSD Compliance

Chart 2

CSDs' compliance with SCoRE Corporate Actions Standards



Notes: The graph summarises the colour codes assigned to the Standards in the Corporate Actions SCoREBOARD for CSDs (see Tables 4 and 5). Proportions are calculated based on the number of Standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
<p>Compliance: Highest levels of compliance with the SCoRE CA Standards are observed in Standards 4 to 14 (which are primarily related to market practices).</p> <p>On Schedule: Standards 1 to 3 and 15 related to workflows and messaging are on schedule and the analysis for implementation has been started.</p> <p>Behind schedule: Standards 1 F, G, H, S2 and S15 are behind schedule for NBB-SSS. Standards 1B, S10, S12, S15 are behind schedule for KELER (see action points).</p> <p>Not applicable: Several responses to Standards (5, 8, 11, 13) should be reviewed (see action points). Standard 3 (Consistency of information) is only relevant for assets held in a custody chain.</p> <p>No reporting / Not started:</p> <p>Changes to Euroclear Finland's Adaptation Plans were announced in June 2020 (i.e. S1, S2, S3, S8, S9, S13, S15) – the information reported above is thus subject to review. Further clarity is needed from Euroclear Bank and SIX SIS (S15). KELER and SIX SIS also should clarify S13.</p> <p>No feedback was received from some non-euro CSDs (CZ, PL, RO, SE, UK).</p>	<p>Several Standards were reported as “not applicable”, while they are in fact applicable. CSDs are invited to review these and reply to the questions on them in the next round:</p> <p>Standard 5 (Negative cash flow): If the CSD only accepts securities with a positive interest rate or floating rate coupons with a floor, this should be reported as compliant as foreseen in the Standard.</p> <p>Standard 8 (Payment time): Procedures should be in place to meet the Standard irrespective whether there is a dependency on receiving the funds before they can be paid.</p> <p>Standard 11 (Default options): A default option should be supported irrespective of whether it is used.</p> <p>Standard 13 (Reversals): Processes for reversals must be implemented.</p> <p>Several Standards were classified as “not applicable” by some respondents. The reason should be provided in the next round:</p> <p>Standard 12 (Fees): In some CSDs, fees are not applied as a result of participation in a CA event (on all assets held as issuer CSD and investor CSD). The N/A reason should be provided when responding.</p> <p>Standard 14 (Foreign currency): If no foreign currency is handled in the CSD, the N/A reason should be provided when responding.</p> <p>Standard 15 should be implemented according to a clear plan. It is not clear if/when Standard 15 will be implemented for Euroclear Bank and SIX SIS. Standard 15 is only partially being implemented by NBB-SSS by November 2022 (i.e. 5 out of 14 ISO messages). In the next round, there should be further clarity.</p> <p>Further guidance will be provided to support the implementation of certain Standards.</p> <p>Standards 6 (Business day) and 8 (Payment time) will be complemented with further guidance. This guidance should be taken into account in the next surveys.</p>

Table 4

SCoREBOARD – Corporate Actions Standards for CSDs (Standard 1A-4)

	1A	1B	1C	1D	1E	1F	1G	1H	2	3	4
AT - Oesterreichische Kontrollbank	G	G	G	G	G	G	G	G	G	G	G
BE - Euroclear Bank	B	B	B	B	B	G	G	B	G	G	G
BE - Euroclear Belgium	G	G	G	G	G	G	G	G	G	G	B
BE - NBB-SSS	G	G	B	G	G	Y	Y	Y	Y	N/A	B
BG - BNBGSSS	G	N/A	G	B	G	N/A	N/A	N/A	B	B	G
BG - CD AD	G	G	G	G	G	G	G	G	G	G	B
CH - SIX SIS	G	G	G	G	G	R	R	R	G	G	B
CY - CYPRUS STOCK EXCHANGE	G	G	G	G	G	G	G	G	G	G	B
CZ - CSD Prague	R	R	R	R	R	R	R	R	R	R	R
CZ - SKD	R	R	R	R	R	R	R	R	R	R	R
DE - Clearstream Banking Frankfurt	G	G	G	G	G	G	G	G	G	G	G
DK - VP Securities	B	G	B	B	G	G	G	G	B	B	G
EE - NASDAQ	G	G	G	G	B	G	G	G	G	G	G
ES - Iberclear	G	G	G	G	G	G	G	G	G	G	G
FI - Euroclear Finland	R	R	R	R	R	R	R	R	R	R	G
FR - Euroclear France	G	G	G	G	G	G	G	G	G	G	B
FR - ID2S	G	N/A	G	G	G	N/A	N/A	N/A	G	G	G
GR - BOGS	G	G	G	G	G	G	N/A	N/A	G	G	G
GR - AthexCSD	G	G	G	G	G	G	G	G	G	G	G
HR - SKDD	G	G	G	G	G	G	G	G	G	G	G
HU - KELER	G	Y	G	G	N/A	N/A	N/A	G	G	G	G
IT - Monte Titoli	G	G	G	G	G	G	N/A	N/A	G	G	B
LT - NASDAQ	G	G	G	G	B	G	G	G	G	G	G
LU - Clearstream Banking Luxembourg	G	G	G	G	G	G	G	G	G	G	G
LU - LuxCSD	G	G	G	G	G	G	G	G	G	G	G
LV - NASDAQ	G	G	G	G	B	G	G	G	G	G	G
MT - Malta Stock Exchange	B	B	B	G	G	G	G	G	G	G	G
NL - Euroclear Nederland	G	G	G	G	G	G	G	G	G	G	B
PL - KDPW	R	R	R	R	R	R	R	R	R	R	R
PL - SKARBNET4	R	R	R	R	R	R	R	R	R	R	R
PT - Interbolsa	G	G	G	G	G	G	G	G	G	G	G
RO - Depozitarul Central	R	R	R	R	R	R	R	R	R	R	R
RO - National Bank of Romania SSS	R	R	R	R	R	R	R	R	R	R	R
SE - Euroclear Sweden	R	R	R	R	R	R	R	R	R	R	R
SI - KDD	G	G	G	G	G	G	G	G	G	G	G
SK - CDCP	G	G	G	G	G	G	G	G	G	G	G
SK - NCDP	G	G	G	G	G	G	G	G	G	G	G
UK - Euroclear UK & Ireland	R	R	R	R	R	R	R	R	R	R	R

Notes: For CSDs and TPAs, the colour code reflects the current implementation status of each Standard in accordance with the methodology outlined in Box 7 above. Percentages are calculated on the basis of actual respondents.

Table 5

SCoREBOARD – Corporate Actions Standards for CSDs (Standards 5 to 15)

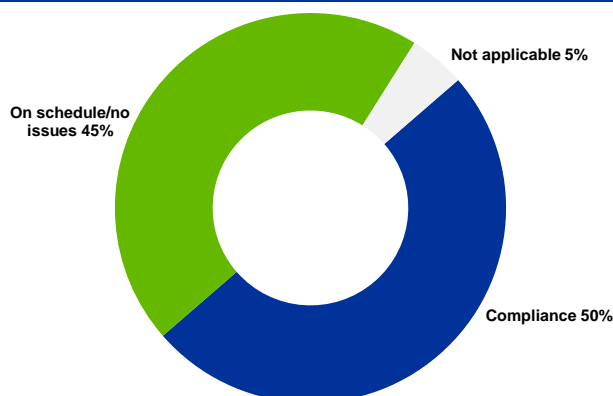
	5	6	7	8	9	10	11	12	13	14	15
AT - Oesterreichische Kontrollbank	G	G	G	G	G	G	G	G	G	G	G
BE - Euroclear Bank	B	B	B	B	B	B	B	B	B	N/A	R
BE - Euroclear Belgium	G	B	B	G	G	B	B	G	B	B	G
BE - NBB-SSS	B	B	B	B	G	G	G	G	G	B	Y
BG - BNBGSSS	G	B	B	B	G	N/A	N/A	N/A	G	N/A	G
BG - CDAD	G	B	B	G	B	G	G	G	G	N/A	G
CH - SIX SIS	B	B	B	N/A	B	G	N/A	B	R	N/A	R
CY - CYPRUS STOCK EXCHANGE	B	B	G	G	G	G	G	N/A	G	N/A	G
CZ - CSD Prague	R	R	R	R	R	R	R	R	R	R	R
CZ - SKD	R	R	R	R	R	R	R	R	R	R	R
DE - Clearstream Banking Frankfurt	G	G	B	B	G	G	B	B	G	B	G
DK - VP Securities	G	B	B	B	G	G	G	G	G	B	G
EE - NASDAQ	N/A	B	G	B	G	B	B	G	B	B	G
ES - Iberclear	B	G	B	G	G	G	B	G	G	G	G
FI - Euroclear Finland	B	G	B	R	R	B	B	N/A	R	G	R
FR - Euroclear France	B	B	G	G	G	B	B	G	B	B	G
FR - ID2S	B	B	B	G	G	N/A	G	N/A	G	N/A	G
GR - BOGS	B	G	B	B	G	B	G	N/A	G	N/A	G
GR - AthexCSD	G	G	G	G	G	G	B	G	G	B	G
HR - SKDD	G	G	B	G	G	G	G	G	G	G	G
HU - KELER	B	G	G	G	G	Y	G	Y	R	N/A	Y
IT - Monte Titoli	B	G	B	G	B	G	G	G	B	G	G
LT - NASDAQ	G	B	B	G	G	B	B	G	B	B	G
LU - Clearstream Banking Luxembourg	G	G	B	B	G	G	B	B	G	B	G
LU - LuxCSD	G	G	B	B	G	G	B	B	G	B	G
LV - NASDAQ	G	G	B	G	G	B	B	G	B	B	G
MT - Malta Stock Exchange	G	G	B	B	G	B	B	N/A	G	N/A	G
NL - Euroclear Nederland	G	B	B	G	G	B	B	G	B	B	G
PL - KDPW	R	R	R	R	R	R	R	R	R	R	R
PL - SKARBNET4	R	R	R	R	R	R	R	R	R	R	R
PT - Interbolsa	N/A	G	B	G	G	G	G	N/A	G	B	G
RO - Depozitarul Central,	R	R	R	R	R	R	R	R	R	R	R
RO - National Bank of Romania SSS	R	R	R	R	R	R	R	R	R	R	R
SE - Euroclear Sweden	R	R	R	R	R	R	R	R	R	R	R
SI - KDD	G	B	B	G	G	G	G	G	G	N/A	G
SK - CDCP	G	G	B	G	G	G	G	G	G	G	G
SK - NCDP	G	G	G	G	G	G	G	G	G	G	G
UK - Euroclear UK & Ireland	R	R	R	R	R	R	R	R	R	R	R

Notes: For CSDs and TPAs, the colour code reflects the current implementation status of each Standard in accordance with the methodology outlined in Box 7 above. Percentages are calculated on the basis of actual respondents. ECB Plausibility Check: Standard 15 was assigned Red for Euroclear Bank and SIX SIS. Standard 15 was assigned Yellow for NBB-SSS.

2.2.2 SCoRE Corporate Actions Standards – TPA Compliance

Chart 3

TPAs' compliance with SCoRE Corporate Actions Standards



Notes: The graph summarises the colour codes assigned to the Standards in the Corporate Actions SCoREBOARD for TPAs (see Table 6). Proportions are calculated based on the number of Standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
<p>Compliance: There is already a large degree of compliance by TPAs with the SCoRE CA Standards relevant for TPAs (i.e. Standards 1A to 1H).</p> <p>On Schedule: Most are on schedule to achieve full compliance with the CA SCoRE Standards</p> <p>Behind schedule:</p> <p>Not applicable: Standards 1F to 1H (meeting-related workflows) were reported as N/A by one TPA (SIX SIS). See action point.</p> <p>No reporting/Not started:</p>	<p>Compliance with Standard 1 by TPAs should encompass both CA event workflows (1A to 1E) and CA meeting workflows (1F to 1H). In the next round, SIX SIS is invited to provide an update on 1F to 1H..</p>

Table 6

SCoREBOARD – Corporate Actions Standards for TPAs

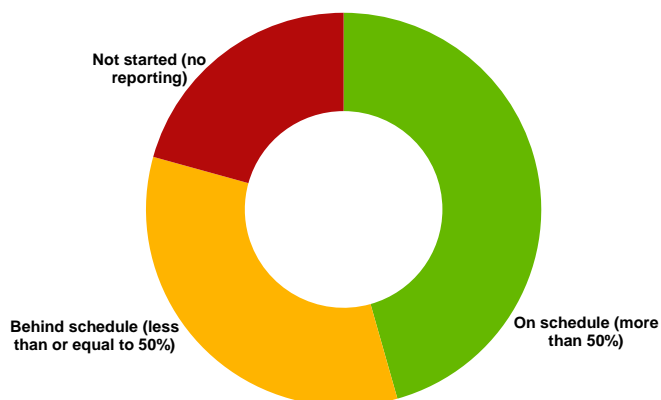
	BE BNY Mellon	BE Euroclear Bank	CH SIX SIS	DE Clearstream Banking Frankfurt	FR BNP Paribas	FR Euroclear France	LU Clearstream Banking Luxembourg	LU JP Morgan
1A	G	B	G	G	B	B	G	B
1B	B	B	G	G	B	B	G	B
1C	G	B	G	G	B	B	G	B
1D	G	B	G	G	B	B	G	G
1E	G	B	G	G	B	B	G	B
1F	B	B	N/A	G	G	B	G	B
1G	B	B	N/A	G	G	B	G	B
1H	B	B	N/A	G	G	B	G	B

Notes: For CSDs and TPAs, the colour code reflects the current implementation status of each Standard in accordance with the methodology outlined in Box 1 above.
TPAs are using custody services provided by CSDs or custodians in order to disseminate CA information to Collateral Givers and Collateral Takers. Monitoring of TPAs thus focuses on the implementation of triparty-specific workflows described in Standard 1. Percentages are calculated on the basis of actual respondents.

2.2.3 SCoRE Corporate Actions Standards – Custodian Compliance

Chart 4

Custodians' compliance with SCoRE Corporate Actions Standards



Notes: The graph summarises the percentages for each AMI-SeCo market where the Standard has either already been implemented or where implementation is on track, calculated from the Standards in the Corporate Actions SCoREBOARD for custodians (see Tables 7 and 8). The aggregation is divided into three groups: above 50%, below or equal to 50% and no reporting or not started. In Finland, custodians based their responses on an earlier Adaptation Plan from Euroclear Finland.

Key takeaways	Action points
<p>Compliance and On Schedule: Compliance from custodians with many of the SCoRE CA Standards is on track (i.e. in 15 markets, more than 50% of custodians were on track).</p> <p>Behind schedule: In some markets, compliance efforts should be increased (in five markets, less than 50% of custodians were on track: AT, DK, EE, LT and LV).</p> <p>No reporting: Custodians in some markets did not yet respond to the survey (BG, CZ, HR, IE, LU, MT, PL, RO and UK).</p>	<p>Custodians reported on the start of their efforts towards compliance and results were aggregated per market/NSG to indicate progress achieved by all custodians in relation to the market. In the case of low compliance figures or no reporting, additional efforts are needed to involve all custodians.</p>

Table 7**SCoREBOARD – Corporate Actions Standards for Custodians (Standards 1A-4)**

	1A	1B	1C	1D	1E	1F	1G	1H	2	3	4
AT	40%	40%	40%	40%	40%	40%	40%	27%	40%	40%	40%
BE	100%	100%	100%	100%	100%	93%	73%	78%	91%	96%	100%
BG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CH	100%	100%	80%	96%	100%	100%	100%	100%	93%	95%	80%
CY	86%	86%	86%	83%	100%	100%	100%	100%	82%	86%	57%
CZ	-	-	-	-	-	-	-	-	-	-	-
DE	66%	66%	67%	60%	68%	60%	60%	61%	62%	63%	66%
DK	31%	30%	27%	26%	20%	48%	50%	33%	24%	24%	28%
EE	33%	33%	33%	33%	33%	33%	33%	33%	27%	33%	33%
ES	65%	68%	64%	72%	67%	62%	62%	64%	61%	58%	71%
FI	100%	100%	89%	87%	67%	100%	93%	78%	61%	56%	92%
FR	80%	80%	80%	76%	80%	80%	80%	80%	69%	68%	80%
GR	100%	100%	100%	97%	79%	100%	71%	81%	69%	74%	89%
HR	-	-	-	-	-	-	-	-	-	-	-
HU	73%	71%	71%	69%	71%	71%	71%	71%	60%	66%	79%
IE	-	-	-	-	-	-	-	-	-	-	-
IT	84%	80%	86%	83%	86%	86%	80%	86%	78%	80%	86%
LT	40%	40%	40%	40%	40%	40%	40%	40%	30%	34%	40%
LU	86%	0%	0%	0%	0%	0%	0%	0%	80%	90%	75%
LV	27%	28%	29%	28%	44%	40%	40%	42%	50%	50%	50%
MT	-	-	-	-	-	-	-	-	-	-	-
NL	90%	93%	94%	90%	92%	83%	67%	67%	89%	88%	96%
PL	-	-	-	-	-	-	-	-	-	-	-
PT	71%	83%	86%	83%	86%	86%	86%	86%	78%	65%	79%
RO	-	-	-	-	-	-	-	-	-	-	-
SE	100%	100%	67%	60%	0%	80%	80%	33%	57%	55%	50%
SI	100%	100%	100%	90%	88%	100%	100%	100%	92%	93%	94%
SK	54%	50%	50%	45%	50%	50%	50%	50%	48%	27%	25%
UK	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Notes: For custodians, the percentage (%) indicates that the Standard has either already been implemented, or that implementation is on track i.e. at a minimum that analysis has already started or that implementation has started per Standard. Percentages are calculated on the basis of actual respondents.

Table 8**SCoREBOARD – Corporate Actions for Custodians (Standards 5-15)**

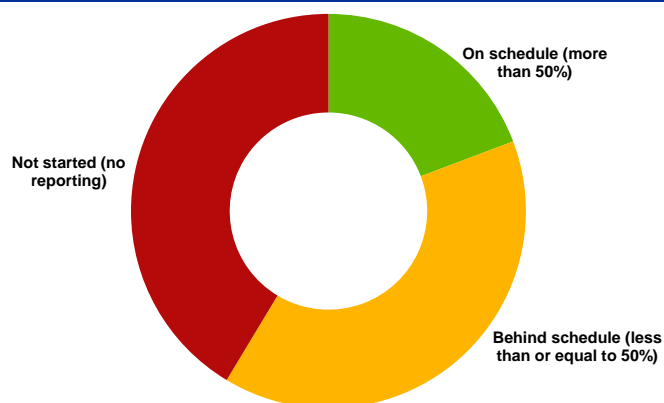
	5	6	7	8	9	10	11	12	13	14	15
AT	20%	40%	40%	27%	20%	40%	40%	40%	40%	40%	40%
BE	67%	100%	100%	67%	100%	100%	100%	100%	100%	33%	33%
BG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CH	100%	100%	100%	13%	100%	100%	80%	100%	40%	40%	60%
CY	57%	100%	100%	29%	86%	86%	100%	14%	100%	0%	71%
CZ	-	-	-	-	-	-	-	-	-	-	-
DE	65%	71%	71%	35%	71%	71%	65%	65%	65%	41%	47%
DK	30%	50%	50%	50%	20%	30%	50%	30%	30%	40%	30%
EE	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%
ES	67%	67%	75%	72%	67%	67%	75%	67%	67%	67%	42%
FI	67%	100%	100%	78%	100%	100%	100%	100%	100%	100%	100%
FR	80%	80%	80%	60%	80%	80%	80%	80%	80%	40%	40%
GR	71%	100%	100%	57%	86%	86%	100%	57%	86%	29%	71%
HR	-	-	-	-	-	-	-	-	-	-	-
HU	86%	71%	86%	52%	86%	86%	86%	86%	86%	43%	57%
IE	-	-	-	-	-	-	-	-	-	-	-
IT	86%	86%	86%	57%	86%	86%	86%	86%	86%	57%	71%
LT	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
LU	0%	100%	100%	0%	100%	100%	100%	0%	0%	0%	0%
LV	50%	50%	50%	50%	50%	50%	50%	50%	50%	38%	50%
MT	-	-	-	-	-	-	-	-	-	-	-
NL	83%	100%	100%	67%	100%	100%	100%	83%	100%	50%	50%
PL	-	-	-	-	-	-	-	-	-	-	-
PT	57%	71%	71%	57%	86%	86%	86%	71%	86%	43%	57%
RO	-	-	-	-	-	-	-	-	-	-	-
SE	100%	100%	0%	33%	100%	100%	100%	100%	100%	100%	100%
SI	50%	75%	100%	42%	75%	100%	100%	75%	75%	25%	75%
SK	25%	25%	25%	0%	25%	25%	25%	25%	25%	0%	0%
UK	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Notes: For custodians, the percentage (%) indicates that the Standard has either already been implemented, or that implementation is on track i.e. at a minimum that analysis has already started or that implementation has started per Standard. Percentages are calculated on the basis of actual respondents.

2.2.4 SCoRE Corporate Action Standards – Issuer Compliance

Chart 5

Issuers' compliance with SCoRE Corporate Action Standards



Notes: The graph summarises the percentages for each AMI-SeCo market where the issuers have confirmed awareness of their obligations, calculated from the Standards in the Corporate Actions SCoREBOARD for issuers (see Table 9). The aggregation is divided into three groups: above 50%, below or equal to 50% and no reporting or not started.

Key takeaways	Action points
<p>Compliance and On Schedule: Compliance with the SCoRE CA Standards is on track in some markets (BE, CY, ES, GR, IT, NL).</p> <p>Behind schedule: In some markets, compliance efforts are low and should be increased (in AT, DE, EE, PT)</p> <p>No reporting: Issuers (and issuer agents) in many markets did not yet respond to the survey and efforts should be increased to receive feedback from the issuer community (BG, CH, CZ, DK, FI, FR, HR, HU, [IE], LT, LU, MT, PL, RO, SE, SI, SK, UK).</p>	<p>Custodians reported on the start of their efforts towards compliance and results were aggregated per market/NSG to indicate</p> <p>Issuers (and issuer agents) should become aware of the SCoRE CA Standards, in particular for:</p> <ul style="list-style-type: none"> • Standard 1 (provision of CA information) • Standard 2 (key data elements) • Standard 3 (consistent information) • Standard 4 (rounding) • Standard 5 (negative cash flow) • Standard 6 (payment time) • Standard 7 (securities amount data) • Standard 8 (redemption) • Standard 9 (delays) • Standard 11 (default options) • Standard 12 (confirmation fees) • Standard 13 (reversal announcements)

Table 9**SCoREBOARD – Corporate Actions Standards for Issuers**

	1A	1F	2	3	4	5	6	7	8	9	11	13
AT	29%	29%	29%	29%	29%	14%	29%	29%	29%	29%	29%	29%
BE	75%	75%	75%	75%	75%	50%	75%	75%	67%	75%	75%	75%
BG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CH	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CY	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
CZ	-	-	-	-	-	-	-	-	-	-	-	-
DE	19%	0%	14%	14%	25%	14%	57%	43%	43%	43%	43%	14%
DK	-	-	-	-	-	-	-	-	-	-	-	-
EE	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
ES	100%	75%	100%	100%	0%	0%	0%	100%	100%	100%	0%	100%
FI	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
FR	-	-	-	-	-	-	-	-	-	-	-	-
GR	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
HR	-	-	-	-	-	-	-	-	-	-	-	-
HU	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
IE	-	-	-	-	-	-	-	-	-	-	-	-
IT	100%	50%	100%	100%	100%	0%	100%	100%	67%	100%	100%	100%
LT	0%	0%	0%	0%	0%	50%	50%	50%	0%	50%	0%	0%
LU	-	-	-	-	-	-	-	-	-	-	-	-
LV	67%	33%	33%	33%	33%	0%	33%	33%	22%	33%	33%	33%
MT	-	-	-	-	-	-	-	-	-	-	-	-
NL	100%	100%	100%	0%	100%	0%	100%	100%	67%	100%	0%	100%
PL	-	-	-	-	-	-	-	-	-	-	-	-
PT	42%	0%	50%	50%	63%	50%	50%	100%	83%	50%	50%	50%
RO	-	-	-	-	-	-	-	-	-	-	-	-
SE	-	-	-	-	-	-	-	-	-	-	-	-
SI	-	-	-	-	-	-	-	-	-	-	-	-
SK	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
UK	-	-	-	-	-	-	-	-	-	-	-	-

Notes: Issuers were asked to confirm awareness of their obligation to provide all relevant information to the issuer CSD (on a yes/no basis). The percentage (%) reflects the number of issuers who responded yes to the survey. Percentages are calculated on the basis of actual respondents.

2.3 Billing Processes

Background

The Single Collateral Management Rulebook for Europe (SCoRE) contains four Standards related to billing processes (published as the [AMI-SeCo Standards for Billing Processes](#)). This section presents the compliance status of the monitored entities as at May 2020.

The Standards being assessed are listed below:

Table 10
SCoRE Billing Processes Standards

No.	Name
1	ISO 20022 messages for billing information
2	Harmonised billing cycles
3	Cut-off date for provision of billing information by (I)CSDs
4	Harmonised dates for payment of fees to (I)CSDs

Source: [Billing Processes: Single Collateral Management Rulebook for Europe](#)

The monitored entities (from the provider side) are:

- CSDs (see Section 2.3.1)
- Triparty Agents (see Section 2.3.2)
- Custodians (see Section 2.3.3)

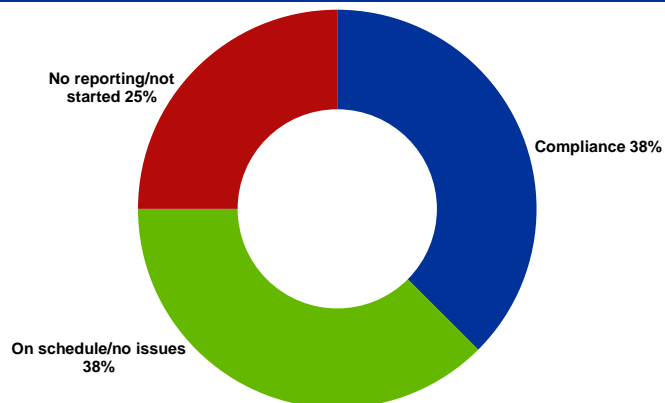
The monitored entities (from the user side) are:

- Eurosystem national central banks: NCBs are monitored by the ECB in their role as users of Corporate Actions services. All Eurosystem NCBs are on track.

2.3.1 SCoRE Billing Processes Standards – CSD Compliance

Chart 6

CSDs compliance with SCoRE Billing Processes Standards



Notes: The graph summarises the colour codes assigned to the Standards in the Billing Processes SCoREBOARD for CSDs (see Table 11). Proportions are calculated based on the number of Standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
<p>Compliance: There is a large degree of compliance with Standards 2 (Billing Cycle) and 3 (Cut-off date).</p> <p>On schedule: Compliance with the remaining Standards 1 (ISO 20022) and 4 (Date for payment fees) is largely on track.</p> <p>Behind Schedule: none.</p> <p>Not applicable: none.</p> <p>No reporting/not started: No feedback was received from some non-euro CSDs (CZ, PL, RO, SE, UK).</p> <p>Further clarity is needed on Standard 4 from ESES CSDs and Euroclear Finland. Clarity is also needed on Standard 1 from Euroclear Finland and SIX SIS.</p>	<p>Standard 4 (Payment date): Compliance should not depend on the party creating the payments (i.e. CSD participants). The Standard is applicable to all CSDs who should indicate that there is a date (deadline) for payments in the CSD rules that complies with the Standards. In the next round, ESES CSDs should provide details on the implementation status of Standard 4.</p>

Table 11

SCoREBOARD – Billing Processes Standards for CSDs

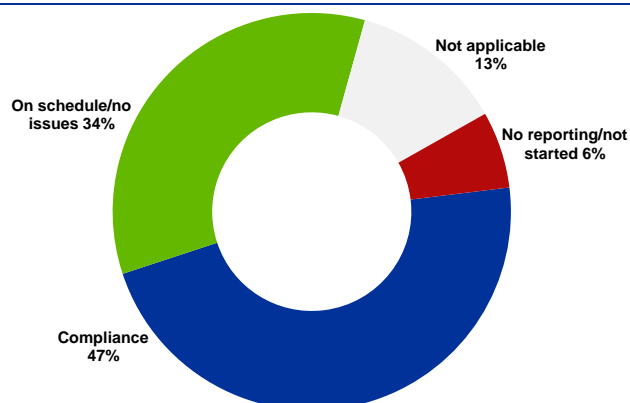
	1	2	3	4
AT - Oesterreichische Kontrollbank	G	B	B	B
BE - Euroclear Bank	G	B	B	B
BE - Euroclear Belgium	G	B	G	R
BE - NBB-SSS	G	B	B	G
BG - BNBGSSS	G	G	G	G
BG - CD AD	G	B	B	B
CH - SIX SIS	R	G	G	G
CY - CYPRUS STOCK EXCHANGE	G	G	G	G
CZ - CSD Prague	R	R	R	R
CZ - SKD	R	R	R	R
DE - Clearstream Banking Frankfurt	G	B	B	B
DK - VP Securities	G	B	B	B
EE - NASDAQ	G	B	B	G
ES - Iberclear	G	B	B	G
FI - Euroclear Finland	R	B	B	R
FR - Euroclear France	G	B	G	R
FR - ID2S	G	B	B	G
GR - BOGS	G	B	B	G
GR - AthexCSD	G	B	B	B
HR - SKDD	G	B	B	G
HU - KELER	G	G	G	G
IT - Monte Titoli	G	B	B	G
LT - NASDAQ	G	B	B	G
LU - Clearstream Banking Luxembourg	G	B	B	B
LU - LuxCSD	G	B	B	B
LV - NASDAQ	G	B	B	G
MT - Malta Stock Exchange	G	B	B	B
NL - Euroclear Nederland	G	B	G	R
PL - KDPW	R	R	R	R
PL - SKARBNET4	R	R	R	R
PT - Interbolsa	G	B	B	G
RO - Depozitarul Central	R	R	R	R
RO - National Bank of Romania SSS	R	R	R	R
SE - Euroclear Sweden	R	R	R	R
SI - KDD	G	B	B	G
SK - CDCP	G	B	B	G
SK - NCDP	G	B	G	G
UK - Euroclear UK & Ireland	R	R	R	R

Notes: For CSDs and TPAs, the colour code reflects the current implementation status of each Standard in accordance with the methodology outlined in Box 7 above. Percentages are calculated on the basis of actual respondents.

2.3.2 SCoRE Billing Processes Standards – TPA Compliance

Chart 7

TPAs' compliance with SCoRE Billing Processes Standards



Notes: The graph summarises the colour codes assigned to the Standards in the Billing Processes SCoREBOARD for TPAs (see Table 12). Proportions are calculated based on the number of Standards of a certain colour across all AMI-SeCo markets.

Key takeaways	Action points
<p>Compliance: There is a large degree of compliance with Standards 2 (Billing Cycle) and 3 (Cut-off date).</p> <p>On schedule: The remaining Standards are largely on track.</p> <p>Behind Schedule: none.</p> <p>Not applicable: Standard 3 (Cut-off date) is only applicable for TPAs that are operated by a CSD (because the Standard requires that CSDs set a cut-off date for providing billing information to clients).</p> <p>No reporting/not started: Standard 4 (Payment date) should be further clarified by one TPA, Euroclear France (see action point). SIX SIS also should provide information on progress in its internal decision process on Standard 1.</p>	<p>Standard 4 (Payment date) is relevant to all TPAs that are also CSDs because the Standard requires that a deadline should be given to participants for payment of fees. It is currently not clear if/when Standard 4 will be implemented by Euroclear France. This should be corrected in the next round.</p>

Table 12

SCoREBOARD – Billing Processes Standards for TPAs

	BE BNY Mellon	BE Euroclear Bank	CH SIX SIS	DE Clearstream Banking Frankfurt	FR BNP Paribas	FR Euroclear France	LU Clearstream Banking Luxembourg	LU JP Morgan
1	G	G	R	G	G	G	G	G
2	B	B	G	B	B	B	B	B
3	N/A	B	G	B	N/A	G	B	N/A
4	B	B	G	B	B	R	B	N/A

Notes: For CSDs and TPAs, the colour code reflects the current implementation status of each Standard in accordance with the methodology outlined in Box 7 above.

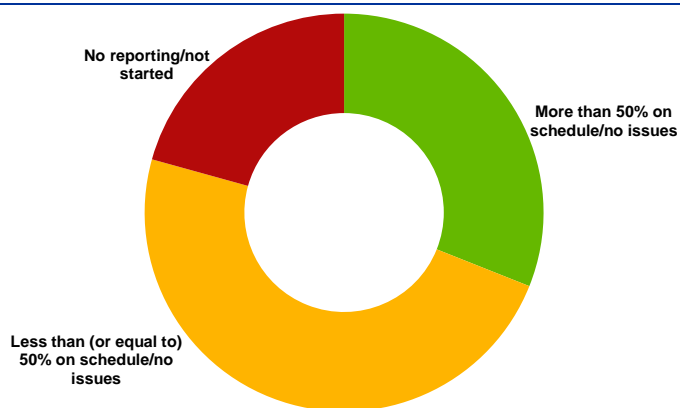
Percentages are calculated on the basis of actual respondents.

ECB Plausibility check: Standard 4 was assigned Red for Euroclear France. Standard 1 was assigned Red for SIX SIS.

2.3.3 SCoRE Billing Processes Standards – Custodian Compliance

Chart 8

Custodians' compliance with SCoRE Billing Processes Standards



Notes: The graph summarises the percentages for each AMI-SeCo market where the Standard has either already been implemented or implementation is on track, calculated from the Standards in the Billing Processes SCoREBOARD for custodians (see Table 13). The aggregation is divided into three groups: above 50%, below or equal to 50%, and no reporting or not started. In Finland, custodians based their responses on an earlier Adaptation Plan from Euroclear Finland.

Key takeaways	Action points
<p>Compliance and On schedule: At 52%, there is progress towards compliance with Standard 2 (Billing Cycle).</p> <p>Behind Schedule:</p> <p>No reporting/not started: No feedback was received from custodians (BG, CZ, HR, IE LU, MT, PL, RO, UK).</p>	<p>The low level of reporting among custodians is a point for attention in the next rounds of the survey.</p>

Table 13**SCoREBOARD – Billing Processes Standards for Custodians**

	1	2	3	4
AT	0%	33%	33%	33%
BE	67%	100%	33%	67%
BG	0%	0%	0%	0%
CH	25%	100%	0%	25%
CY	57%	100%	14%	29%
CZ	-	-	-	-
DE	71%	88%	24%	41%
DK	17%	50%	33%	17%
EE	0%	0%	0%	50%
ES	67%	83%	58%	67%
FI	33%	67%	67%	33%
FR	60%	80%	40%	60%
GR	50%	83%	33%	50%
HR	-	-	-	-
HU	71%	86%	57%	71%
IE	-	-	-	-
IT	57%	71%	0%	14%
LT	50%	50%	50%	100%
LU	0%	0%	0%	0%
LV	43%	43%	29%	43%
MT	-	-	-	-
NL	80%	100%	20%	40%
PL	-	-	-	-
PT	67%	100%	33%	33%
RO	-	-	-	-
SE	0%	100%	100%	0%
SI	75%	100%	75%	100%
SK	33%	67%	0%	0%
UK	0%	0%	0%	0%

Notes: For custodians, the percentage (%) indicates that the Standard has either already been implemented, or that implementation is on track i.e. at a minimum that analysis has already started or that implementation has started per Standard. Percentages are calculated on the basis of actual respondents.

3 Compliance Indicators

On the basis of information contained in the Adaptation Plans, a series of key Compliance Indicators have been identified. These indicators serve as the basis for tracking preparations and assigning the colour -coded assessment throughout the implementation phase.

All implementing actors were invited to confirm (on a yes/no basis) whether the Compliance Indicators identified in the Adaptation Plans are being met / expected to be met. This tool was agreed in the NSGs to facilitate the consistent implementation across markets (given the long-term efforts that are needed) and avoids issues remaining undetected until the deadline for compliance.

There are two Compliance Indicators per year.



The current H1 2020 monitoring exercise focuses on the first Compliance Indicator “Analysis Started”. This covers the following aspects:

- **[ADAPT] Analysis Started:** has the analysis of all technical changes to be implemented (e.g. business processes, workflows, new messaging formats and required internal adaptations to IT systems) started?
- **[COMMUNICATE] Initial User Communication:** is initial communication to users planned (to take place at the latest by June 2020)?

The entity should be on track on both aspects in order to receive the green colour code in the assessment.

3.1 Triparty Collateral Management

Compliance Indicators – SCoRE Triparty Collateral Management Standards – TPAs

Key takeaways	Action points
<p>Compliance Indicator 1: Several TPAs confirmed that they have met the first Indicator on schedule while some TPAs did not provide a confirmation.</p> <ul style="list-style-type: none"> Euroclear Bank, Euroclear France and SIX SIS explained that internal decision and approval processes are ongoing. Analysis has started on the workflows (while analysis and planning on the messaging format will follow). Clearstream explained that analysis has progressed and communication will commence later. This has no impact on the overall timeline. <p>Compliance Indicators 2 to 4: Several TPAs confirmed that they expect to meet the interim indicators while some TPAs did not provide a confirmation.</p> <ul style="list-style-type: none"> Euroclear Bank, Euroclear France and SIX SIS explained that adaptations need to be confirmed (subject to internal decision-making process). Clearstream explained that adaptation may not start until 2021, but this does not impact the overall timeline. <p>Compliance Indicator 5: Many TPAs expect to meet the final Compliance Indicator prior to the implementation deadline (see action points)</p> <ul style="list-style-type: none"> Euroclear Bank, Euroclear France and SIX SIS: Timing could potentially be met (depending on internal decision-making process). At 52%, there is progress towards compliance with Standard 2 (Billing Cycle). 	<p>The Compliance Indicators do not point to any blocking factor towards achieving full compliance with the Triparty SCoRE Standards but the following actions are needed:</p> <ul style="list-style-type: none"> SIX SIS – updates should be provided on the outcome of the internal decision-making process as part of the next monitoring exercise. Clearstream – a progress update on the in-depth analysis should be included in the next round. Euroclear Bank and Euroclear France – updates to be provided in the next round on the Compliance Indicators (which are in line with the explanations provided in Section 2.1.1 – <i>TPAs' compliance with SCoRE Triparty Collateral Management Standards above</i>).

Table 14

TPA Compliance Indicators – SCoRE Triparty Collateral Management Standards

	1 Apr-20	2 Nov-20	3 May-21	4 Nov-21	5 May-22	6 Nov-22
BE - BNY Mellon	Yes	Yes	2021-12	Yes	Yes	Implementation date
BE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Implementation date
CH - SIX SIS	2022-05	2022-05	2022-05	Yes	2022-05	Implementation date
FR - BNP Paribas	Yes	Yes	Yes	Yes	Yes	Implementation date
FR - Euroclear France	Yes	Yes	Yes	Yes	Yes	Implementation date
DE - Clearstream Banking Frankfurt	2020-09	2021-01	2021-05	2021-11	Yes	Implementation date
LU - Clearstream Banking Luxembourg	2020-09	2021-01	2021-05	2021-11	Yes	Implementation date
LU - JP Morgan	Yes	Yes	Yes	Yes	Yes	Implementation date

Notes: Actors were asked to report for all Compliance Indicators, i.e. whether they meet the current Indicator (1) and whether they expect to meet the dates for future Indicators.

ECB Secretariat plausibility check: The Indicators 1 to 5 have been assigned Red for Euroclear Bank, Euroclear France and SIX SIS until the analysis starts according to a clear agreed decision/timing/plan.

3.2 Corporate Actions

3.2.1 Compliance Indicators – SCoRE Corporate Actions Standards – CSDs

Key takeaways	Action points
<p>Compliance Indicator 1: 16 CSDs have reported that they have met the first Indicator while 14 CSDs will meet it later. See action points.</p> <ul style="list-style-type: none"> NBB-SSS will only implement a certain degree of functionality (which is currently not offered) by November 2025. The reason for this is to avoid updating legacy messaging Standards. This does not meet the agreed timings when CSDs have to be able to offer the service. KELER will only implement some Corporate Action Events (i.e. processing related to elective Corporate Actions) by April 2022. SIX SIS has started analysis but no detailed timetable is available (and the expectation is to implement it in 2025). Some CSDs allocate resources slightly later for the first indicators (Clearstream, LuxCSD, Nasdaq, OeKB, BNBGSSS, AthexCSD and Interbolsa), but this has no impact on the overall compliance deadline. No action needed. Euroclear Finland will not be able to meet the first indicator because of its focus on planning migration to T2S, but expects to plan in 2021 (see action points). VP Securities still needs to deliver its Adaptation Plan. <p>Compliance Indicators 2 to 4: 22 CSDs expect to meet the interim Indicators. 8 CSDs expect to meet the interim Indicators at a later date.</p> <ul style="list-style-type: none"> NBB-SSS and KELER expect to meet the Indicators for some aspects between 2022 and 2024. SIX SIS expects to meet the Indicators in 2025 (subject to further analysis). Clearstream, LuxCSD, VP Securities, SKDD, Interbolsa and Monte Titoli expect to finalise the in-depth analysis later (which may impact the interim milestones). However, Clearstream, LuxCSD, VP Securities, Interbolsa and Monte Titoli expect to meet the final deadline. Euroclear Finland will not be able to meet the interim Indicators (see action points). Euroclear Finland will initiate a planning round for the remaining tasks in 2021 and the adaptation will start after that. <p>Compliance Indicator 5: CSDs confirmed their expectation to meet the final Compliance Indicator prior to the implementation deadline.</p>	<p>The Compliance Indicators do not point to major blocking factors towards achieving full compliance with the SCoRE CA Standards but the following actions are needed.</p> <ul style="list-style-type: none"> NBB-SSS, KELER and SKDD are invited to review their late compliance deadlines (and if possible bring them forward). Euroclear Finland and SIX SIS are invited to provide their detailed planning. 13 CSDs should still reply to the survey in order to complete the picture (in CZ, PL, RO, SE and UK markets).

Table 15

Compliance Indicators – SCoRE Corporate Actions Standards – CSDs

	1 Apr-20	2 Nov-20	3 May-21	4 Nov-21	5 May-22	6 Nov-22
AT - Oesterreichische Kontrollbank	2020-09	2021-03	Yes	Yes	Yes	Implementation date
BE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Implementation date
BE - Euroclear Belgium	Yes	Yes	Yes	Yes	Yes	Implementation date
BE - NBB-SSS	(Yes)	2022-11	2023-11	2024-11	2025-05	Implementation date
BG - BNBGSSS	2020-07	Yes	Yes	Yes	Yes	Implementation date
BG - CD AD	Yes	2021-01	Yes	Yes	Yes	Implementation date
CH - SIX SIS	2025-10	2025-10	2025-10	2025-10	2025-10	Implementation date
CY - CYPRUS STOCK EXCHANGE	Yes	Yes	Yes	Yes	Yes	Implementation date
CZ - CSD Prague	R	R	R	R	R	Implementation date
CZ - SKD	R	R	R	R	R	Implementation date
DE - Clearstream Banking Frankfurt	2020-09	2021-01	2021-05	2021-11	Yes	Implementation date
DK - VP Securities	2020-10	2021-10	Yes	Yes	Yes	Implementation date
EE - NASDAQ	2020-09	Yes	Yes	Yes	Yes	Implementation date
ES - Iberclear	Yes	Yes	Yes	Yes	Yes	Implementation date
FI - Euroclear Finland	Yes	Yes	Yes	2024-03	2024-03	Implementation date
FR - Euroclear France	Yes	Yes	Yes	Yes	Yes	Implementation date
FR - ID2S	Yes	Yes	Yes	Yes	Yes	Implementation date
GR - BOGS	Yes	Yes	Yes	Yes	Yes	Implementation date
GR - AthexCSD	2020-06	Yes	Yes	Yes	Yes	Implementation date
HR - SKDD	Yes	2021-12	2021-12	2023-12	2023-12	Implementation date
HU - KELER	2022-04	2022-11	2023-05	2023-11	2024-05	Implementation date
IT - Monte Titoli	Yes	2021-03	Yes	Yes	Yes	Implementation date
LT - NASDAQ	2020-09	Yes	Yes	Yes	Yes	Implementation date
LU - Clearstream Banking Luxembourg	2020-09	2021-01	2021-05	2021-11	Yes	Implementation date
LU - LuxCSD	2020-09	2021-01	2021-05	2021-11	Yes	Implementation date
LV - NASDAQ	2020-09	Yes	Yes	Yes	Yes	Implementation date
MT - Malta Stock Exchange	Yes	Yes	Yes	Yes	Yes	Implementation date
NL - Euroclear Nederland	Yes	Yes	Yes	Yes	Yes	Implementation date
PL - KDPW	R	R	R	R	R	Implementation date
PL - SKARBNET4	R	R	R	R	R	Implementation date
PT - Interboisa	2020-10	2021-02	Yes	Yes	Yes	Implementation date
RO - Depozitarul Central	R	R	R	R	R	Implementation date
RO - National Bank of Romania SSS	R	R	R	R	R	Implementation date
SE - Euroclear Sweden	R	R	R	R	R	Implementation date
SI - KDD	Yes	Yes	Yes	Yes	Yes	Implementation date
SK - CDCP	Yes	Yes	Yes	Yes	Yes	Implementation date
SK - NCDCP	Yes	Yes	Yes	Yes	Yes	Implementation date
UK - Euroclear UK & Ireland	R	R	R	R	R	Implementation date

Notes: Actors were asked to report for all Compliance Indicators, i.e. whether they meet the current Indicator (1) and whether they expect to meet the dates for future Indicators.
 ECB Secretariat plausibility check: Indicator 1 was assigned Yellow for NBB-SSS as analysis on some Standards has not yet commenced. Euroclear Finland will initiate a new planning round.

3.2.2 Compliance Indicators – SCoRE Corporate Actions Standards – TPAs

Key takeaways	Action points
<p>Compliance Indicator 1: Half of TPAs have reported to meet the first Indicator but remaining TPAs expect to meet it later (see action points).</p> <ul style="list-style-type: none"> Some TPAs need more time to perform in-depth analysis on some aspects (Clearstream) or need internal approval (SIX SIS) <p>Compliance Indicators 2 to 4: Several Indicators are expected not to be met, but will be met later. This has no impact on the overall schedule and thus full compliance is expected in accordance with the timeline agreed by AMI-SeCo.</p> <p>Compliance Indicator 5: All TPAs confirmed their expectation to meet the Indicator.</p>	<p>The Compliance Indicators of TPAs do not point to any blocking factor towards meeting compliance with the Billing SCoRE Standards.</p> <ul style="list-style-type: none"> Some TPAs required further time to perform analysis, which should be a point of attention in the next round as it may have an impact on interim Indicators. Updates should be included in the next round.

Table 16

Compliance Indicators – SCoRE Corporate Actions Standards – TPAs

	1 Apr-20	2 Nov-20	3 May-21	4 Nov-21	5 May-22	6 Nov-22
BE - BNY Mellon	Yes	Yes	2021-12	Yes	Yes	Implementation date
BE - Euroclear Bank	Yes	Yes	Yes	Yes	Yes	Implementation date
CH - SIX SIS	2022-05	2022-05	2022-05	Yes	2022-05	Implementation date
DE - Clearstream Banking Frankfurt	2020-09	2021-01	2021-05	2021-11	Yes	Implementation date
FR - BNP Paribas	Yes	Yes	Yes	Yes	Yes	Implementation date
FR - Euroclear France	Yes	Yes	Yes	Yes	Yes	Implementation date
LU - Clearstream Banking Luxembourg	2020-09	2021-01	2021-05	2021-11	Yes	Implementation date
LU - JP Morgan	Yes	Yes	Yes	Yes	Yes	Implementation date

Notes: Actors were asked to report for all Compliance Indicators, i.e. whether they meet the current Indicator (1) and whether they expect to meet the dates for future Indicators.

3.2.3 Compliance Indicators – SCoRE Corporate Actions Standards – Custodians

Key takeaways	Action points
<p>Compliance Indicator 1: In some markets, the majority of custodians have reported to meet the first Indicator (CH, CY, ES, GR, HU, IT, PT). Around half of custodians in a number of markets also expect to meet the Indicator (DE, FI, FR, NL).</p> <p>Compliance Indicators 2 to 4: The number of custodians that expect to meet the remaining Indicators varies (either increases or decreases).</p> <p>Compliance Indicator 5: There is an increase for most markets.</p>	<p>The reason for the small part of custodians that expect to meet the milestones should be further investigated. A possible explanation for this is that the current work has mainly involved CSDs and TPAs. Another possible explanation is the lower response rate due to the current coronavirus (COVID-19) situation. Custodians should however step up their preparations and report their Compliance Indicators in the next round.</p>

Table 17**Compliance Indicators – SCoRE Corporate Actions Standards for Custodians**

	1 Apr-20	2 Nov-20	3 May-21	4 Nov-21	5 May-22	6 Nov-22
AT	40%	40%	40%	40%	40%	Implementation date
BE	40%	40%	20%	20%	40%	Implementation date
BG	0%	0%	0%	0%	0%	Implementation date
CH	67%	67%	50%	50%	50%	Implementation date
CY	100%	100%	100%	100%	100%	Implementation date
CZ	-	-	-	-	-	Implementation date
DE	47%	47%	53%	53%	53%	Implementation date
DK	7%	0%	0%	0%	21%	Implementation date
EE	0%	0%	0%	0%	20%	Implementation date
ES	62%	62%	69%	85%	85%	Implementation date
FI	50%	50%	50%	50%	50%	Implementation date
FR	50%	38%	38%	38%	38%	Implementation date
GR	86%	86%	86%	86%	86%	Implementation date
HR	-	-	-	-	-	Implementation date
HU	56%	56%	56%	56%	56%	Implementation date
IE	-	-	-	-	-	Implementation date
IT	86%	57%	86%	57%	71%	Implementation date
LT	0%	11%	11%	11%	22%	Implementation date
LU	50%	50%	50%	50%	50%	Implementation date
LV	23%	31%	31%	31%	38%	Implementation date
MT	-	-	-	-	-	Implementation date
NL	56%	56%	56%	56%	56%	Implementation date
PL	-	-	-	-	-	Implementation date
PT	56%	56%	56%	56%	56%	Implementation date
RO	-	-	-	-	-	Implementation date
SE	0%	0%	0%	0%	0%	Implementation date
SI	25%	25%	50%	75%	100%	Implementation date
SK	17%	17%	17%	17%	17%	Implementation date
UK	0%	0%	0%	0%	0%	Implementation date

Notes: Actors were asked to report for all Compliance Indicators, i.e. whether they meet the current Indicator (1) and whether they expect to meet the dates for future Indicators (on a yes/no basis). The percentages reflect the number of custodians in AMI-SeCo markets where implementation is on track for the Compliance Indicator, i.e. responded yes to the survey. Percentages are calculated as the share of custodians that answered yes among the monitored entities in the AMI-SeCo market.

3.3 Billing Processes

3.3.1 Compliance Indicators – SCoRE Billing Processes Standards – CSDs

Key takeaways	Action points
<p>Compliance Indicator 1: 19 CSDs have reported that they have met the first Indicator for the SCoRE Standards for Billing Processes, while 11 CSDs will meet it at a later date.</p> <ul style="list-style-type: none">• Euroclear plans no high-level communication.• Clearstream and LuxCSD will communicate as of Q3 2020.• Interbolsa plans its analysis for Q4 2020. <p>Compliance Indicators 2 to 4: Most Indicators are expected to be met but some Indicators will be met at a later date.</p> <ul style="list-style-type: none">• Euroclear explained that the migration to the new billing system/tools is planned for Q1 2021 and implementation in 2021/2022.• Clearstream, LuxCSD and Interbolsa will finalise their in-depth analysis at a slightly later date but expect to meet the implementation deadline. SKDD also needs more time.• Euroclear Finland will not be able to implement the interim Indicators (see action points). <p>Compliance Indicator 5: The situation is expected to improve in terms of meeting the final Indicator prior to the implementation deadline.</p> <ul style="list-style-type: none">• Euroclear Finland and SKDD do not expect to meet the Indicator (see action points).	<p>The Compliance Indicators of CSDs do not point to any blocking factor towards meeting compliance with the Billing SCoRE Standards. Later interim dates are reported in BE (Euroclear Bank and Euroclear Belgium), DE, FI, FR, IT, LU, NL and PT. This is related to internal adaptations to billing systems or the need for further in-depth analysis. However, this does not have an impact on achieving full compliance in most cases.</p> <ul style="list-style-type: none">• Two CSDs (Euroclear Finland and SKDD) reported a later date for Indicator 5. This should be explained further by the CSDs. It is a point of attention for the next round.• Several CSDs should report on their Compliance Indicators (CH, CZ, HR, PL, RO, SE and UK).

Table 18

Compliance Indicators – SCoRE Billing Processes Standards for CSDs

	1 Apr-20	2 Nov-20	3 May-21	4 Nov-21	5 May-22	6 Nov-22
AT - Oesterreichische Kontrollbank	Yes	Yes	Yes	Yes	Yes	Implementation date
BE - Euroclear Bank	2021-03	2021-03	Yes	Yes	Yes	Implementation date
BE - Euroclear Belgium	2021-03	2021-03	2021-09	2022-03	Yes	Implementation date
BE - NBB-SSS	Yes	Yes	Yes	Yes	Yes	Implementation date
BG - BNBGSSS	2020-07	Yes	Yes	Yes	Yes	Implementation date
BG - CD AD	Yes	Yes	Yes	Yes	2024-06	Implementation date
CH - SIX SIS	2022-03	2022-03	2022-03	2022-03	Yes	Implementation date
CY - CYPRUS STOCK EXCHANGE	Yes	Yes	Yes	Yes	Yes	Implementation date
CZ - CSD Prague	R	R	R	R	R	Implementation date
CZ - SKD	R	R	R	R	R	Implementation date
DE - Clearstream Banking Frankfurt	2020-09	2021-01	2021-05	2021-11	Yes	Implementation date
DK - VP Securities	Yes	Yes	Yes	Yes	Yes	Implementation date
EE - NASDAQ	Yes	Yes	Yes	Yes	Yes	Implementation date
ES - Iberclear	Yes	Yes	Yes	Yes	Yes	Implementation date
FI - Euroclear Finland	Yes	2024-03	2024-03	2024-03	2024-03	Implementation date
FR - Euroclear France	2021-03	2021-03	2021-09	2022-03	Yes	Implementation date
FR - ID2S	Yes	Yes	Yes	Yes	Yes	Implementation date
GR - BOGS	Yes	Yes	Yes	Yes	Yes	Implementation date
GR - AthexCSD	2020-06	Yes	Yes	Yes	Yes	Implementation date
HR - SKDD	Yes	2021-12	2021-12	2023-12	2023-12	Implementation date
HU - KELER	Yes	Yes	Yes	Yes	Yes	Implementation date
IT - Monte Titoli	Yes	2021-03	Yes	Yes	Yes	Implementation date
LT - NASDAQ	Yes	Yes	Yes	Yes	Yes	Implementation date
LU - Clearstream Banking Luxembourg	2020-09	2021-01	2021-05	2021-11	Yes	Implementation date
LU - LuxCSD	2020-09	2021-01	2021-05	2021-11	Yes	Implementation date
LV - NASDAQ	Yes	Yes	Yes	Yes	Yes	Implementation date
MT - Malta Stock Exchange	Yes	Yes	Yes	Yes	Yes	Implementation date
NL - Euroclear Nederland	2021-03	2021-03	2021-09	2022-03	Yes	Implementation date
PL - KDPW	R	R	R	R	R	Implementation date
PL - SKARBNET4	R	R	R	R	R	Implementation date
PT - Interboisa	2020-10	2021-02	Yes	Yes	Yes	Implementation date
RO - Depozitarul Central	R	R	R	R	R	Implementation date
RO - National Bank of Romania SSS	R	R	R	R	R	Implementation date
SE - Euroclear Sweden	R	R	R	R	R	Implementation date
SI - KDD	Yes	Yes	Yes	Yes	Yes	Implementation date
SK - CDCP	Yes	Yes	Yes	Yes	Yes	Implementation date
SK - NCDCP	Yes	Yes	Yes	Yes	Yes	Implementation date
UK - Euroclear UK & Ireland	R	R	R	R	R	Implementation date

Notes: Actors were asked to report for all Compliance Indicators, i.e. whether they meet the current Indicator (1) and whether they expect to meet the dates for future Indicators.
ECB Secretariat plausibility check: Euroclear Finland will initiate a new planning round

3.3.2 Compliance Indicators – SCoRE Billing Processes Standards – TPAs

Key takeaways	Action points
<p>Compliance Indicator 1: Most TPAs have reported some delay with the first Indicator for the SCoRE Standards for Billing Processes. However, almost all TPAs expect to meet the implementation deadline.</p> <ul style="list-style-type: none"> Some TPAs need more time for in-depth analysis (BNY Mellon and Clearstream) or plan changes later in 2021 (Euroclear and SIX SIS). <p>Compliance Indicators 2 to 4: Same as Indicator 1.</p> <p>Compliance Indicator 5: All reporting TPAs confirmed their expectation to meet the Indicator (or to meet it soon after the implementation milestone in the case of BNY Mellon).</p>	<p>The Compliance Indicators do not point to any blocking factor towards meeting compliance with the Billing SCoRE Standards:</p> <ul style="list-style-type: none"> Some TPAs which required further analysis (BNY Mellon, Clearstream) should include updates on the interim Indicators in the next round. Some TPAs which planned interim steps at a later point (Euroclear, SIX SIS) should also provide updates if needed.

Table 19
Compliance Indicators – SCoRE Billing Processes Standards for TPAs

	1 Apr-20	2 Nov-20	3 May-21	4 Nov-21	5 May-22	6 Nov-22
BE - BNY Mellon	2020-09	2021-02	2022-01	2022-06	2022-09	Implementation date
BE - Euroclear Bank	2021-03	2021-03	Yes	Yes	Yes	Implementation date
CH - SIX SIS	2022-03	2022-03	2022-03	2022-03	Yes	Implementation date
DE - Clearstream Banking Frankfurt	2020-09	2021-01	2021-05	2021-11	Yes	Implementation date
FR - BNP Paribas	Yes	Yes	Yes	Yes	Yes	Implementation date
FR - Euroclear France	2021-03	2021-03	2021-09	2022-03	Yes	Implementation date
LU - Clearstream Banking Luxembourg	2020-09	2021-01	2021-05	2021-11	Yes	Implementation date
LU - JP Morgan	Yes	Yes	Yes	Yes	Yes	Implementation date

Notes: Actors were asked to report for all milestones, i.e. whether they meet the current milestone (1) and whether they expect to meet the dates for future milestones.

3.3.3 Compliance Indicators – SCoRE Billing Processes Standards – Custodians

Key takeaways	Action points
<p>Compliance Indicator 1: In some markets, good progress was made.</p> <ul style="list-style-type: none"> In eight markets, the majority of custodians have reported to meet the first Indicator for the SCoRE Standards for Billing Processes, (i.e. CH, CY, DE, ES, GR, HU, IT, PT). In three markets, many custodians also reported progress (FI, FR, NL). <p>Compliance Indicators 2 to 5: Similar results as for the first Indicator.</p>	<p>The Compliance Indicators suggest that custodian progress in many markets is low.</p> <ul style="list-style-type: none"> In seven markets, a small number of custodians have reported to meet the first Indicator (i.e. AT, BE, DK, EE, LT, LV, SK). A larger number of custodians should start their preparations in the next round. In ten markets, there was no response and custodians should report on the Compliance Indicators in the next round (BG, CZ, HR, IE, LU, MT, PL, RO, SE, UK).

Table 20**Compliance Indicators – SCoRE Billing Processes Standards for Custodians**

	1 Apr-20	2 Nov-20	3 May-21	4 Nov-21	5 May-22	6 Nov-22
AT	20%	20%	20%	20%	20%	Implementation date
BE	20%	20%	0%	0%	20%	Implementation date
BG	0%	0%	0%	0%	0%	Implementation date
CH	67%	67%	67%	67%	67%	Implementation date
CY	100%	100%	100%	100%	100%	Implementation date
CZ	-	-	-	-	-	Implementation date
DE	70%	65%	65%	70%	70%	Implementation date
DK	7%	0%	0%	7%	14%	Implementation date
EE	20%	20%	20%	20%	20%	Implementation date
ES	62%	62%	69%	69%	69%	Implementation date
FI	50%	50%	50%	50%	50%	Implementation date
FR	44%	33%	33%	33%	33%	Implementation date
GR	86%	86%	86%	86%	86%	Implementation date
HR	-	-	-	-	-	Implementation date
HU	56%	44%	44%	44%	56%	Implementation date
IE	-	-	-	-	-	Implementation date
IT	57%	57%	57%	57%	57%	Implementation date
LT	11%	22%	22%	22%	22%	Implementation date
LU	0%	0%	0%	0%	0%	Implementation date
LV	23%	31%	31%	31%	31%	Implementation date
MT	-	-	-	-	-	Implementation date
NL	44%	33%	33%	33%	44%	Implementation date
PL	-	-	-	-	-	Implementation date
PT	56%	56%	56%	56%	56%	Implementation date
RO	-	-	-	-	-	Implementation date
SE	0%	0%	0%	0%	0%	Implementation date
SI	25%	50%	50%	50%	75%	Implementation date
SK	17%	17%	33%	33%	33%	Implementation date
UK	0%	0%	0%	0%	0%	Implementation date

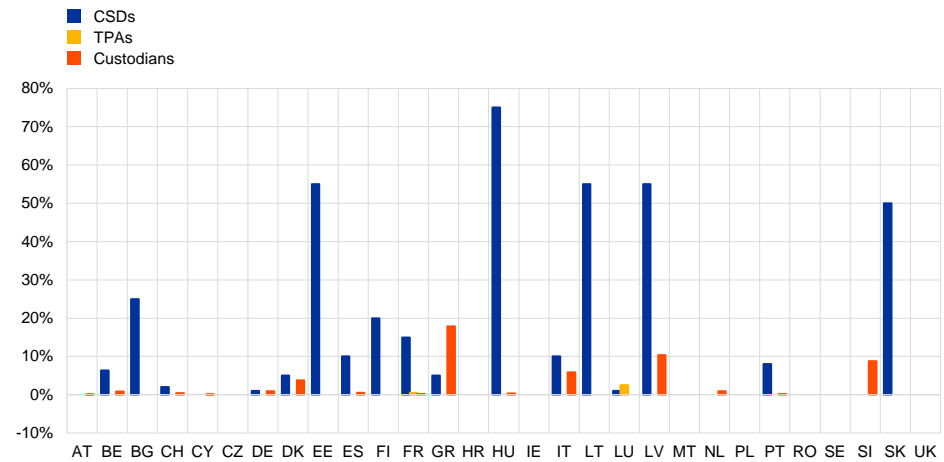
Notes: Actors were asked to report for all Compliance Indicators, i.e. whether they meet the current Indicator (1) and whether they expect to meet the dates for future Indicators (on a yes/no basis). The percentages reflect the number of custodians in AMI-SeCo markets where implementation is on track for the milestone, i.e. responded yes to the survey. Percentages are calculated as the share of custodians that answered yes among the monitored entities in the AMI-SeCo market.

4 ISO 2022 Adoption

In order to track progress in the market-wide adoption of ISO 2022 messaging, information is collected from reporting entities on the percentage of their clients / counterparties who have the capability to communicate in Application-to-Application (A2A) format using ISO 2022 messages.

The chart below represents the percentage of CSD, TPA and custodian clients who have the capability to communicate A2A using ISO 2022 messages as at May 2020.

Chart 1
ISO 2022 adoption – May 2020



Notes: CSDs, TPAs and custodians were asked to provide an estimate of the percentage of their clients who have the capability to communicate A2A using ISO 2022 messages as at May 2020. The percentages in the table reflect the average of these replies per entity type per AMI-SeCo market.

Annex 1: NSG Reporting

NSG	Triparty Collateral Management	Corporate Actions	Billing Processes
AT	N/A	1 CSD 5 Custodians 7 Issuers	1 CSD 5 Custodians
BE	2 TPAs	3 CSDs 2 TPAs 5 Custodians 4 Issuers	3 CSDs 2 TPAs 5 Custodians
BG	N/A	2 CSDs 16 Custodians 72 Issuers	2 CSDs 16 Custodians
CH	1 TPA	1 CSD 1 TPA 6 Custodians 4 Issuers	1 CSD 1 TPA 6 Custodians
CY	N/A	1 CSD 7 Custodians 1 Issuer	1 CSD 7 Custodians
CZ	N/A	No reporting in H1 2020	No reporting in H1 2020
DE	1 TPA	1 CSD 1 TPA 17 Custodians 8 Issuers	1 CSD 1 TPA 17 Custodians
DK	N/A	1 CSD 14 Custodians	1 CSD 14 Custodians
EE	N/A	1 CSD 5 Custodians 7 Issuers	1 CSD 5 Custodians
ES	N/A	1 CSD 13 Custodians 2 Issuers	1 CSD 13 Custodians
FI	N/A	1 CSD 4 Custodians 6 Issuers	1 CSD 4 Custodians
FR	2 TPAs	2 CSDs 2 TPAs 9 Custodians	2 CSDs 2 TPAs 9 Custodians
GR	N/A	2 CSDs 7 Custodians 1 Issuer	2 CSDs 7 Custodians
HR	N/A	1 CSD	1 CSD
HU	N/A	1 CSD 9 Custodians 6 Issuers	1 CSD 9 Custodians
IE	N/A	No reporting in H1 2020	No reporting in H1 2020
IT	N/A	1 CSD 7 Custodians 1 Issuer	1 CSD 7 Custodians





NSG	Triparty Collateral Management	Corporate Actions	Billing Processes
LT	N/A	1 CSD 9 Custodians 8 Issuers	1 CSD 9 Custodians
LU	2 TPAs	2 CSDs 2 TPAs 2 Custodians	2 CSDs 2 TPAs 2 Custodians
LV	N/A	1 CSD 13 Custodians 27 Issuers	1 CSD 13 Custodians
MT	N/A	1 CSD	1 CSD
NL	N/A	1 CSD 9 Custodians 1 Issuer	1 CSD 9 Custodians
PL	N/A	No reporting in H1 2020	No reporting in H1 2020
PT	N/A	1 CSD 9 Custodians 1 Issuer 1 Issuer association	1 CSD 9 Custodians
RO	N/A	No reporting in H1 2020	No reporting in H1 2020
SE	N/A	1 CSD 1 Custodian	1 CSD 1 Custodian
SI	N/A	1 CSD 4 Custodians	1 CSD 4 Custodians
SK	N/A	2 CSDs 6 Custodians 6 Issuers	2 CSDs 6 Custodians
UK	N/A	No reporting in H1 2020	No reporting in H1 2020

Annex 2: Glossary





Term	Explanation
Account servicer	Party that manages the account on behalf of the account owner (i.e. it manages the registration and booking of entries on the account, calculates balances on the account and provides information about the account). Account servicers include Triparty Agents, (international) central securities depositories ((I)CSDs) and custodians.
Account owner	Party that legally holds the account or the party in a contractual relationship with the account servicer.
AMI-SeCo community	Financial market infrastructures, market participants and central banks participating in AMI-SeCo and AMI-SeCo National Stakeholder Groups (NSGs) in the European Union, United Kingdom and Switzerland.
AMI-SeCo markets	Financial markets and relevant financial market stakeholders in the European Union, the United Kingdom and Switzerland.
AMI-SeCo Standards	Part of a single rulebook based on common business processes, workflows and ISO 20022 messaging for asset servicing and managing collateral with central banks and/or with commercial banks.
Central Clearing Counterparty (CCP)	An entity that interposes itself, in one or more markets, between the counterparties to the contracts traded, becoming the buyer to every seller and the seller to every buyer and thereby guaranteeing the performance of open contracts.
Commercial bank processes	Business processes relevant to commercial bank operations.
Custodians	Commercial banks acting in their capacity as account servicers.
ESES	Euroclear Settlement of Euronext-zone Securities
Eurosystem central banks	The national central banks of the countries that have adopted the euro as their single currency, acting in their role as collateral takers for Eurosystem credit operations.
(International) central securities depositories ((I)CSDs)	Issuer and investor (international) central securities depositories also acting as account servicers. An (I)CSD is defined as an entity that (1) enables securities transactions to be processed and settled by book entry, (2) provides custodial services (e.g. the administration of Corporate Actions and redemptions), and (3) plays an active role in ensuring the integrity of securities issues. Securities can be held in a physical (but immobilised) form or in a dematerialised form (whereby they exist only as electronic records).
Issuers (agent)	The issuer of an Underlying Security including the agent mandated by the Issuer for Corporate Actions purposes.
Monitoring Framework	Description and methodology for the regular monitoring and assessment by National Stakeholder Groups of relevant markets' degree of compliance with the agreed AMI-SeCo Standards.
SCoRE	Single Collateral Management Rulebook for Europe
Triparty agents (TPAs)	Agents regulated as (international) central securities depositories and/or custodians/commercial banks that act as providers of triparty services.
Users	Collateral givers and collateral takers (including central banks, commercial banks and central clearing counterparties) that use the services of collateral management and asset servicing providers.

Annex 3: Sample NSG reporting



Triparty Collateral Management

	 Response rate	 Implementation status	 Implemented on Time?
TPA - Clearstream Banking Luxembourg	100%	Implemented 31.2% Analysis started 68.7% Implementation started 0%	Yes
TPA - JP Morgan	100%	Implemented 36% Analysis started 48% Implementation started 16%	Yes

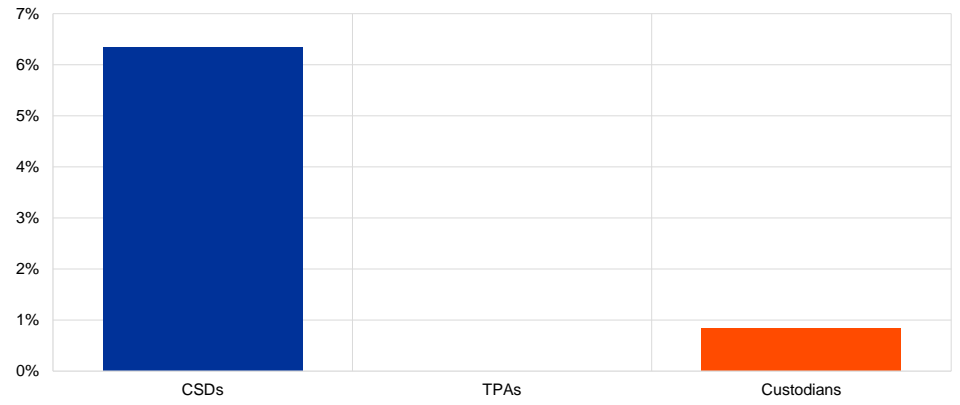
Corporate Actions

	 Response rate	 Implementation status	 Implemented on Time?
Custodians	60%	Implemented 40.5% Analysis started 52.9% Implementation started 6.50%	40%
Issuers	100%	Yes 73% No 2%	n/a
CSD - Euroclear Bank	100%	Implemented 90% Analysis started 2.72% Implementation started 7.27%	Yes
CSD - Euroclear Belgium	100%	Implemented 37.9% Analysis started 42.2% Implementation started 19.8%	Yes
CSD - NBB-SSS	100%	Implemented 37.8% Analysis started 62.1% Implementation started 0%	2025-05
TPA - BNY Mellon	100 %	Implemented 50% Analysis started 50% Implementation started 0%	Yes
TPA - Euroclear Bank	100 %	Implemented 100% Analysis started 0% Implementation started 0%	Yes

Billing Processes

	 Response rate	 Implementation status	 Implemented on Time?
Custodians	60%	Implemented 37.5% Analysis started 62.5% Implementation started 0%	20%
CSD - Euroclear Bank	100%	Implemented 66.6% Analysis started 33.3% Implementation started 0%	Yes
CSD - Euroclear Belgium	100%	Implemented 33.3% Analysis started 66.6% Implementation started 0%	Yes
CSD - NBB-SSS	100%	Implemented 50% Analysis started 25% Implementation started 25%	Yes
TPA - BNY Mellon	100 %	Implemented 66.6% Analysis started 33.3% Implementation started 0%	2022-09
TPA - Euroclear Bank	100 %	Implemented 66.6% Analysis started 33.3% Implementation started 0%	Yes

ISO reporting



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For specific terminology please refer to the [ECB glossary](#) (available in English only).

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